

MARCH
2001

lighting

architectural

The In-Crowd

The Lighting Hall Of Fame

James Turrell: Exploring the Limits of Light
The Firm: Smart Business Practices
Fixtures for the Great Outdoors

A Bill Communications Publication
U.S. \$7.00
www.lightforum.com

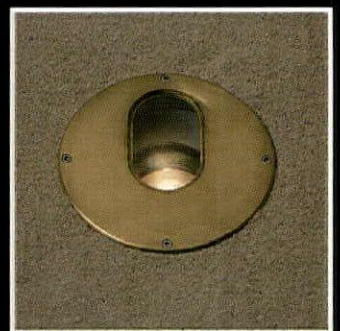
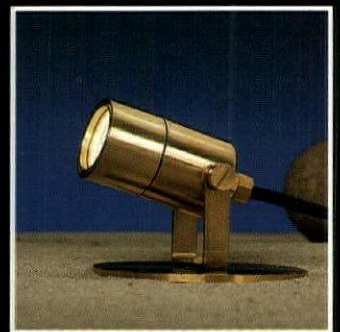
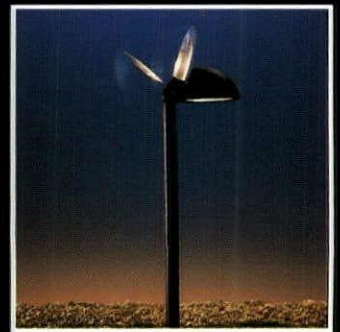
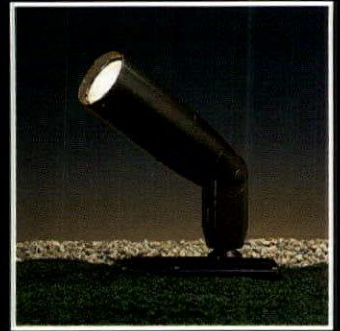


Lumière

THE LEADER IN OUTDOOR ARCHITECTURAL
AND LANDSCAPE LIGHTING



At Lumière, we bring your creations to life with a full spectrum of innovative outdoor lighting solutions.



BRUCK

L I G H T I N G S Y S T E M S



V/A

V/A, a track system with a variety of internal connectors and mounting elements, can easily change directions and elevations. It is available in straight segments, standard or custom radius, in chrome, matte chrome, or gold finish.

V/A is one of eight different systems manufactured by **BRUCK**,
the leading innovator in track and cable lighting technology.

714.424.0500

714.424.0505 Fax

Costa Mesa, CA

www.brucklighting.com

Circle No. 2 on reader service card or visit lightforum.com/marketplace

19 HALL OF FAME

- LIVING LEGENDS** 20 Howard Brandston
 21 Lesley Wheel
 22 William Lam
 23 Motoko Ishii
 24 Sonny Sonnenfeld
 25 David DiLaura
- REMEMBERING ...** 26 Abe Feder
 27 Edison Price
 28 James Nuckolls

INTERVIEW

- 12 Light Artist James Turrell



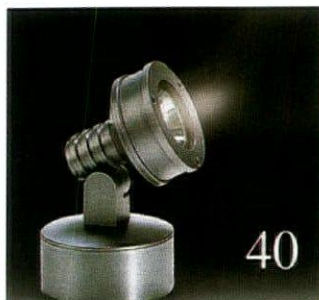
TURRELL'S RODEN CRATER

SPECIAL BUSINESS SECTION

- 30 Professional Liability and the Lighting Designer
 34 Professional Service Agreements
 38 Ownership: The Future of Your Firm

DEPARTMENTS

- 8 **News**
 8 The Inbox
 9 People
 11 Datebook
- 40 **Product Picks** Outdoor & Landscape Lighting
 48 **Endpoint** What Does LC Really Mean?



OUTDOOR & LANDSCAPE

Architectural Lighting (Vol. 16, No. 2 USPS 000-846, ISSN 0894-0436) is published eight times per year (Jan/Feb, Mar, Apr, May, July, Aug/Sept, Oct/Nov, Dec) by Bill Communications, 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, \$86. Periodicals Postage Paid at New York, NY and additional mailing offices. Printed in the USA. POSTMASTER: Send changes of address to Architectural Lighting, PO Box 1061, Skokie, IL 60076-8061.

Architectural Lighting is a trademark owned exclusively by Bill Communications, Inc., a VNU USA Company. Copyright 2001 Bill Communications Inc. All rights reserved. Reproduction of this magazine, in whole or in part, is prohibited unless authorized by the publisher. Editorial and advertising offices: One Penn Plaza, New York, NY 10119-1198. Phone (212) 714-1300. 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.

architectural lighting

MARCH 2001

VOL.16, NUMBER 2

EDITORIAL STAFF

EDITOR-IN-CHIEF

CHRISTINA TRAUTHWEIN
(212) 615-2631
ctrauthwein@billcom.com

ART DIRECTOR

JONATHAN MARSLAND
(212) 615-2273
jmarstrand@billcom.com

ASSOCIATE EDITOR

ALICE LIAO
(212) 615-3067
aliao@billcom.com

CONTRIBUTING EDITORS

WANDA JANKOWSKI, JEAN GORMAN,
DAVID HOUGHTON, PE, PHIL TAMELONIS,
MARCELLINE SANTOS-TAYLOR

EDITORIAL ADVISERS

RENSE COOLEY, COOLEY MONATO STUDIO
HOWARD BRANDSTON, LC, FIALD,
FIES, BRANDSTON PARTNERSHIP
GARY STEFFY, LC, FIALD,
GARY STEFFY LIGHTING DESIGN
RAND ELLIOTT, FAIA,
ELLIOTT + ASSOCIATES

SUPPORT

PRODUCTION

VINCE HABICK
(212) 615-2229
fax (212) 643-5611

LIST RENTAL

(845) 620-9000
fax (845) 620-9035

CIRCULATION

NICOLE CHANTHARAJ
(212) 615-2813
fax (212) 279-4460

CUSTOMER SERVICE

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

REPRINTS

VICKI BREWSTER
(516) 365-2646
fax (516) 681-7315
62 Northwoods Rd.
Manhasset, NY 11030

ADVERTISING SALES

EAST/INTERNATIONAL

CLIFF SMITH
(212) 615-2649
fax (212) 279-3970
csmith@billcom.com

MIDWEST/CENTRAL

MARIE KOWALCHUK
(773) 792-1830
fax (773) 792-1831
mkowalchuk@billcom.com

WEST

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

WEB SALES

DAN PERLMUTTER
(212) 615-2727
fax (212) 279-3955
dperlmutter@billcom.com

CLASSIFIED SALES

(212) 615-2727
fax (212) 279-3955

INTERNET

LIGHTFORUM.COM MANAGER

RANDY HELLER
(505) 424-1033
raheller@billcom.com

CORPORATE OFFICERS

MICHAEL MARCHESANO, PRESIDENT
TONI NEVITT, CHIEF OPERATING OFFICER
JOHN MULVEY, VP HUMAN RESOURCES
JOHN MASTRANGELO, DIRECTOR OF FINANCE
JOANNE WHEATLEY, VP CIRCULATION
BARBARA DEVLIN, VP MANUFACTURING,
PRODUCTION & DISTRIBUTION

GROUP PRESIDENTS

MICHAEL F. CHARLTON, JOHN FAILLA,
DOUGLAS HOPE, RICHARD O'CONNOR



Bill Communications
a VNU Business Media company

Real Estate and Design Group

REAL ESTATE: COMMERCIAL PROPERTY NEWS, MULTI-HOUSING NEWS
DESIGN: ARCHITECTURE, ARCHITECTURAL LIGHTING, CONTRACT, FACILITIES DESIGN &
MANAGEMENT, HOSPITALITY DESIGN, INTERIORS, KITCHEN & BATH BUSINESS

OTHER BILL COMMUNICATIONS GROUPS

GENERAL AND SPECIALTY RETAILING; RETAIL AND FOOD MEDIA; RETAIL DESIGN;
TRAVEL, PERFORMANCE AND HEALTHCARE

 **vnu business media**

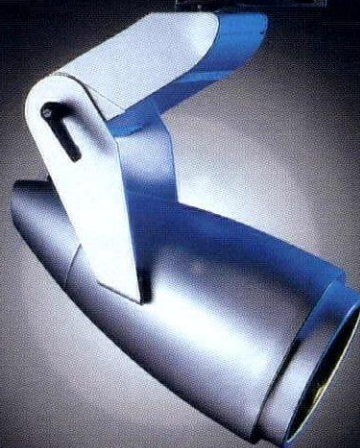
President & Chief Executive Officer
John Wickersham
Senior VP Business Development
Greg Farrar
Chief Financial Officer
Joseph Furey

President, VNU Expositions
James Bracken
President, VNU E Media
Jeremy Grayzel



Copyright © 2001 Bill Communications, Inc.

MARCH 2001



BULLS EYE

Specifically designed
for long throws, the new
LSI MT6 Metal Halide unit
is always on target.

For a MT6 information kit,
send your letterhead to:
Lighting Services Inc
2 Kay Fries Drive
Stony Point, NY 10980
(800) 999-9574



www.LightingServicesInc.com

Circle No. 4 on reader service card or visit
lightforum.com/marketplace

Presc•lite

A NEW QUALITY OF LIGHT

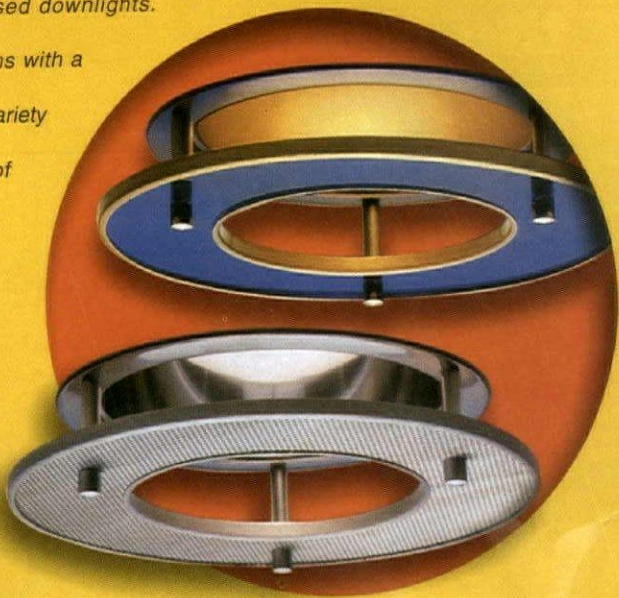
YOU like 'em? You should. You asked us to build them. You were looking for beauty. Sophistication. Style. And simplicity. You wanted quality. Easy maintenance. High durability. And exceptional performance. You asked us to focus on color. Accents. And architectural relevance. And you wanted a low price. We **love** a challenge. We scratched our heads. Searched for new technologies. Manufacturing processes. Materials. And designs. The result: our new, innovative Lite Deco™ trims. Our hard work is paying off. Not just our work at the factory, but our collaborative efforts with top interior designers and lighting professionals to create the most architecturally relevant and effective lighting solutions possible. *Really* focusing on your needs. Maybe that's the most important innovation of all. So, what do you want to **focus** on now?



TRUSTING YOU
T R U S T I N G

Introducing Lite Deco™. Essential architectural trims for Lite Box® recessed downlights.

This offering is truly unique because it is comprised of seven distinct designs with a large selection of reflector and lamp choices, finish options, and a wide variety of beautiful, decorative elements from which to choose. What's more, all of this design freedom is offered at an uncommonly low price. Visit our website to learn more about our new vision of decorative downlighting.



www.prescolite.com



OUR VISION
YOUR VISION

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

MERGERS & ACQUISITIONS

Engineered Lighting Products has acquired Videssence, a manufacturer of fluorescent lighting fixtures for the video/broadcast industry.

Targetti-Tivoli, Inc. and partner organization Extérieur Vert Lighting have joined forces under a unified corporate name, **Targetti North America**. Eric Kramer has been marked to head the new Santa Monica-based company as CEO.

ON THE MOVE ...

The Los Angeles office of **Horton Lees Brogden Lighting Design** has relocated to 8580 Washington Boulevard, Culver City, CA 90232. To contact the office, phone (310) 837-0929, fax (310) 837-0902.

The U.S. operation of **OPTI** has moved to 116 Sylvia Road, Suite A, Ashland, VA 23005; phone (804) 752-2570, fax (804) 752-2888. OPTI is a UK-based manufacturer of gobo projection products.

CALL FOR ENTRIES

The 25th Annual Cooper Lighting National Competition is accepting entries for 2001.

The ASID-sponsored contest is open to any lighting designer, architect, interior designer or professional who uses light in an interior or exterior permanent application. Students in any of these disciplines are also eligible to enter conceptual lighting installations, to be judged in a separate category.

Professional winners will receive trophies and national recognition through publicity and advertising. Students will receive trophies and \$1,500. The competition requires the use of any or all of the Cooper Lighting brands, which include Halo, Metalux, Portfolio, Neo-Ray, Corelite, Sure-Lites, Lumark, McGraw-Edison, Fail-Safe, Lumiere, Iris Lighting Systems and Shaper.

For rules and additional information, contact Cooper Lighting at (912) 924-8000. Deadline for entries is July 20, 2001. Judging takes place in August 2001.

ON THE WEB ...

The Nuckolls Fund for Lighting Education's website is up and running at www.nuckollsfund.org. The site provides application information for the three Nuckolls grants: 1) \$20,000 for a university or college with an established lighting program to enhance program development; 2) \$20,000 for a university or college with a fundable plan to establish a lighting program; and 3) a \$7,500 Edison Price Fellowship for an educator to broaden his architectural lighting education. Winners will be announced May 30, 2001.

Edison Price Lighting has launched its new website for lighting specifiers at www.epl.com. The site's key element is the Product Finder that allows users to search for lighting fixtures by

NCQLP ANNOUNCES 2000 RESULTS

The NCQLP reported that 198 people passed their 2000 exam, bringing the total number of Lighting Certified Professionals to 996. The pass rate was 86 percent. 2000 was the first year in



which graduate and undergraduate lighting students had the opportunity to sit the exam as participants in the NCQLP Intern Program. Twelve students took and passed the exam, earning the Intern LC credential.

KIRLIN OPENS SHOWROOM AND EDUCATION CENTER

The Kirlin Company has opened Reflection Point, a showroom and education center geared toward the specification community. Architects, engineers and lighting designers can earn NCQLP recertification credits and CEUs authorized by the IESNA by attending free courses offered at the center. Initial offerings include "Health Care and Medical Lighting" and "Fundamentals of Commercial Lighting."

For more information on Reflection Point and its facilities and programs, contact the center at 3401 East Jefferson Avenue, Detroit, MI 48207-4232, phone (313) 259-6400, fax (313) 259-9409.

CORRECTION...

In the January/February 2001 issue of *Architectural Lighting*, the name of fixture manufacturer Architectural Details, Inc. was inadvertently omitted from "Details" in the cover story about the Tribeca Grand Hotel (pages 20-23).

Architectural Lighting regrets the error.

keyword, table of contents or feature. When a desired fixture is located, its catalog sheet is immediately available for download. The site also provides links to Datametries, Edison Price's proprietary photometric database. The database can be used with lighting design programs like AGI 32 and Lumen Micro 2000.

Lightolier's online education program, "Lessons in Lighting," has been accredited by the American Lighting Association (ALA) and American Institute of Architects (AIA). Accessible at www.lightolier.com, the program now offers 19 lessons and a 100-question exam. AIA members can earn up to 13 Learning Units by completing the program and the ALA has awarded 9.5 Continuing Learning Credits.

Ralph W. Swarens, founder and president of Engineered Lighting Products, passed away of a heart attack on January 7, 2001 at the age of 69.

Swarens started his career in the lighting industry in 1961, representing numerous lighting and controls companies, but later moved into consulting to pursue his strong interest in quality lighting design. Noticing a niche in the market that was not being addressed, he founded Engineered Lighting Products in 1985 to market high-quality lighting products. A member of the IES, Swarens served as president of the IES Southern California section and VP of the U.S. Institute of Technical Theatre, Southern California section. In addition to be an award-winning lighting designer, Swarens taught lighting design at the Otis Art Institute and Cal State Pomona.

A family memorial service was held on January 26, 2001 at The Celebrity Centre in Hollywood, CA.

Horton Lees Brogden Lighting Design has appointed **Douglas Russell, LC**, **Hrout-Tania Tina Aghassian, LC** and **Lilian M. Rodriguez, LC** associate.

Katherine N. Wildt has been named national sales manager at Baldinger Architectural Lighting and Louis Baldinger & Sons, Inc. Baldinger Architectural Lighting has appointed **Philip Di Gregorio** manager of the New York showroom.

Rick Lincicome, AIA has been named CEO at Ellerbe Becket; **Robert Degenhardt**, who has served as CEO since 1994, will become president.

100watt Network has appointed **Robert Mongiardini** VP and national sales manager.

Stephen Kohl has joined Bega/US as national sales manager.

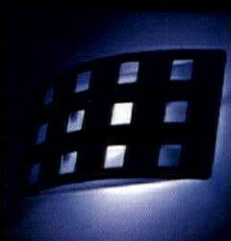
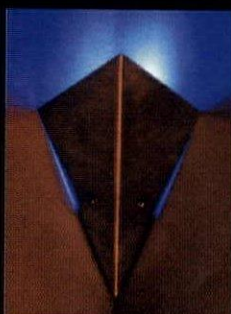
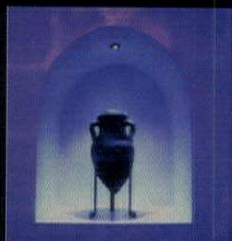
Osram Sylvania's general lighting business unit has named **Joel Beyerle**, **Chris Coliandris**, **Brian Ditchek**, **Richard D. Leaman** and **Kevin P. McGarry** strategic business manager.

Lynne Dunn has been promoted to associate at Taylor & Associates Architects.

Richard L. Angel has been named senior VP of Lutron Electronics Co., Inc.

Crawford Lipsey has been named VP, sales and marketing at Holophane.

Brennan Beer Gorman has named **David Hawthorne** and **Marlon Fernandez** senior associate and **Frank Bonura** and **Robert E. Estorque** associate. Brennan Beer Gorman Monk has promoted **Bahram Kamali, AIA** to senior associate and **Marilyn Reid** and **Theresa Carroll** to associate.

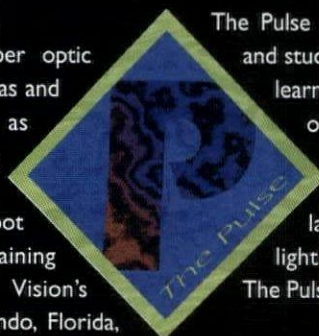


Experience The Pulse.

The place where fiber optic lighting application ideas and solutions as well as educational and training opportunities exist.

A new 2500 square foot showroom and training center at Super Vision's headquarters in Orlando, Florida,

The Pulse offers designers, clients and students the opportunity to learn and create with state-of-the-art fiber optic lighting systems. For a virtual tour and the latest in fiber optic lighting technology visit The Pulse on-line at thepulse.cc.



FIBER OPTIC LIGHTING

SUPERVISION
INTERNATIONAL

svision.com

All Exhibitors Are Manufacturers

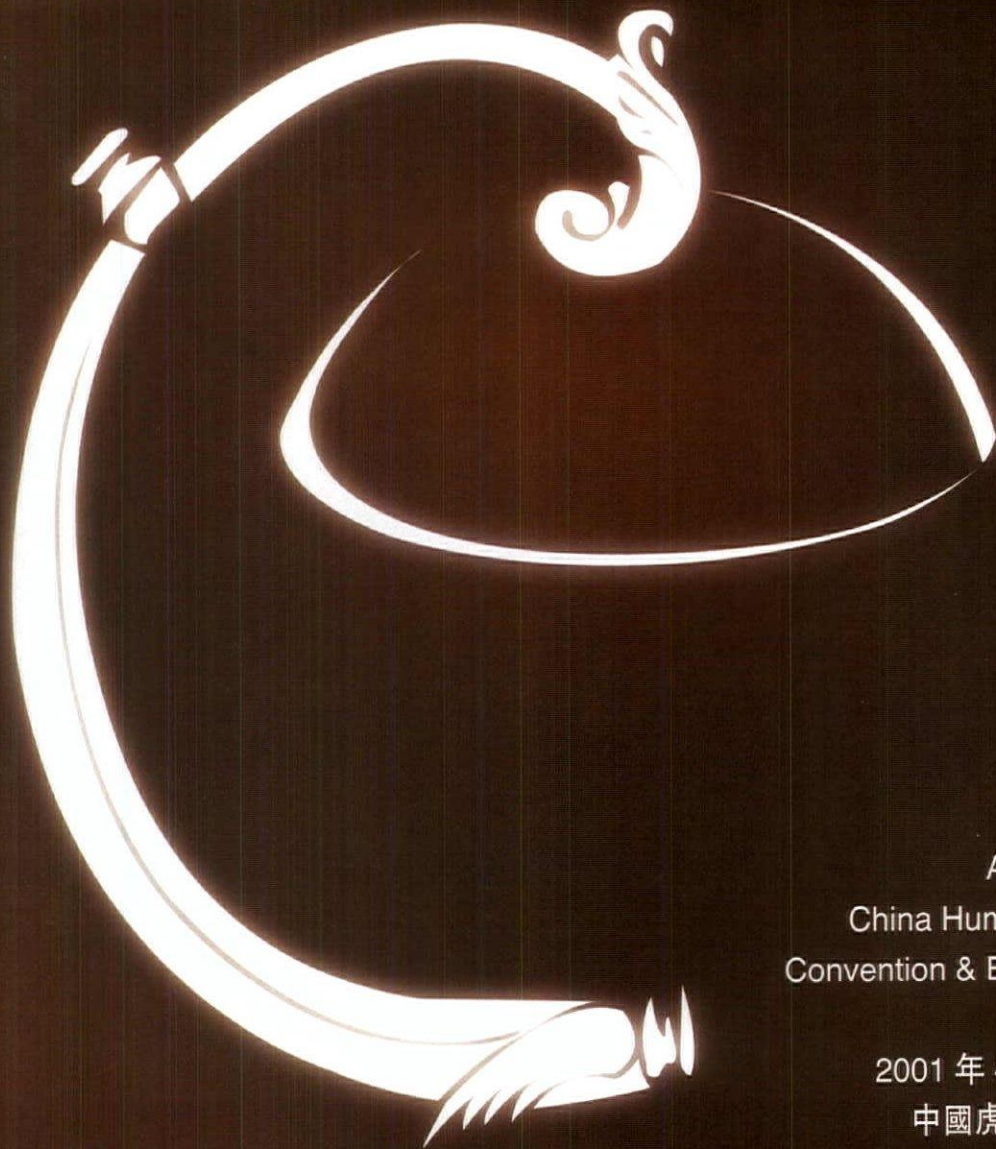
CLAS 2001

China Lighting Accessories Show 2001

2001 中國燈飾配件展



龍媒



April 22-24, 2001
China Humen International
Convention & Exhibition Centre

2001年4月22日-24日
中國虎門國際會展中心

Name _____
Company Name _____
Address _____
_____ Zip _____
Tel _____ Fax _____
E-mail _____ Website _____

- I am interested in visiting CLAS2001
 I am interested in exhibiting at CLAS2001

**For further information, please
complete and return this form to :**

ChinaMedia
Rm. 1615、1616、1618, 16/F
International Bank Tower
191 Dongfeng Rd. W.
Guangzhou 510180, P.R. China
Tel: +86-20-81351035 81351998
Fax: +86-20-81351401
E-mail: clas@chinamedia.org
www.chinamedia.org



The Best E-Marketplace For China Lighting

2001 SCHEDULED EVENTS

April 2-July 29 Light! The Industrial Age: 1750-1900, Carnegie Museum of Art, Pittsburgh, PA. Contact: (414) 622-3131.

April 11 "Architecture in Motion: Design for the Entertainment Ships of the Future." New York School of Interior Design, Arthur King Satz Hall, New York. Contact: (212) 472-1500.

April 21 IESNY ED-100 Lighting Fundamentals Workshop: "Lighting Applications for Visual Performance," New York. Contact: Steve Mesh at (212) 613-1563, smesh@genlyte.com.

April 21 IESNY ED-150 Intermediate Level Lighting Workshop: "Psychological Aspects of Lighting: Applications Design Concepts," New York. Contact: Steve Mesh at (212) 613-1563, smesh@genlyte.com.

April 22-24 IESNA Southeastern Regional Conference, Atlanta. Contact: S. Funkhouser at sfunkhouser@cdai.com.

April 22-25 Lightstyle: International Trade Fair for Domestic Lighting, Messe Frankfurt, Frankfurt, Germany. Contact: (49) 69 75 75-0.

May 30-June 1 Lightfair International, Las Vegas Convention Center, Las Vegas, NV. Contact: (404) 220-2221, www.lightfair.com.

June 18-20 LUX Europa 2001: the 9th European Lighting Conference, University Cinema—Conference and Cultural Center, Reykjavik, Iceland. Contact: (354) 585 4309, conference@icelandtravel.is.

June 18-20 NeoCon World's Trade Fair, The Merchandise Mart, Chicago. Contact: (800) 677-6278, www.merchandisemart.com.

June 18-22 Laser 2001, Munich Trade Fair Centre, Munich, Germany. Contact: (312) 377-2650, fax (312) 377-2660, www.munichtradefairs.com.

June 20-23 IESNA Northeastern Regional Conference—Beacon of Light, Boston Park Plaza Hotel, Boston, MA. Contact: dmadden@luxlightingdesign.com, www.iesnewengland.com.

June 21-22 AEE Seminar: "Fundamentals of Energy Management," Memphis, TN. Contact: (770) 925-9633, www.aeecenter.org.

August 5-8 2001 IESNA Annual Conference, Ottawa, Canada. Contact: Valerie Landers at (212) 248-5000, ext. 117.

September 11-14 China International Lighting Exhibition 2001, Shanghai Everbright Convention & Exhibition Center, Shanghai, China. Contact: (301) 424-7060.

September 23-25 World Workplace 2001, Kansas City, MO. Contact: (713) 623-4362.

Illuminate Vibrant Colors With Con-Tech's High Efficiency Wall/Liters™



w a l l / l i t e r ™

Whatever the products, when they bask in the smooth, even light of CON-TECH's Wall/Liters™ their textures and color look even better. 42 watt Triple* twin tube compact fluorescent lamps deliver high-lumen output with superior light distribution. The fully aimable, durable aluminum fixture may be track or fixed mounted to an outlet box with an accessory adapter.

Call to request CON-TECH's Track Lighting catalog for the complete Wall/Liter™ series and other contemporary track fixtures.

*Osram/Sylvania



3865 Commercial Ave. • Northbrook, IL 60062
Phone: 800/728-0312 • 847/559-5500
Fax: 847/559-5505 • www.con-techlighting.com



© Copyright 2001 Conservation Technology Ltd.

Ask about our
speed of light®
shipping service.

Adventures in Perception

Over the years, Architectural Lighting Magazine has received numerous suggestions to interview light artist James Turrell, as his work and his vision have inspired many. Well, the time has come. What follows is an in-depth dialogue between Turrell and lighting designer Renee Cooley—one of his many admirers—in which the legendary artist speaks about his work, his views and of course, his monumental project, the Roden Crater.

Q: Your undergraduate degree was in perceptual psychology and as a postgraduate, you studied art. What were your initial influences for exploring perception and using light and space as media?

A: My interest was always working with light. However, in art school, emphasis was placed on the color wheel and other useless “information,” so I couldn’t really learn about the kind of work I wanted to do or even find out how to acquire the tools of my trade. But this lack of information furthered my interest in dealing with the psychology of color and perception.

Q: What in particular drove you to want to explore perception?

A: There are three things related to how we greet light: The first is our relationship with light. We relate to light on a physical level. We literally drink light as Vitamin D through the skin, so it’s actually a food. The second is the psychological influence of color, which has been studied more thoroughly in recent years. A third factor is our spiritual relationship to light, in that most religious or spiritual experiences are described in the vocabulary of light.

In reference to teaching the color wheel and thinking about light, we have some outmoded ways of talking about color. This is a surface culture and people think of light and color in terms of paints and strange descriptions such as “green” or “tangerine orange.” We don’t have a very good language for light. You need to speak about light in terms of its frequency. There is truth in light in the sense that it’s all natural light. There’s nothing but natural light. You have to burn something to get light and the light that you get is characteristic of what you burn and the temperature at which it burns. So we can speak about light and color in terms of this frequency that comes to us—either from a surface or from the light itself—rather than just in terms of the surface quality.

But in talking about color, we must address the issue of context as well. You can have the same yellow spot—with the same frequency reaching your eye—in a blue field or a red one and the spot will appear as different colors. So I’m not only interested in working with light or its frequency, but I also explore how we greet light with our perception. In developing my craft and manipulating this intangible thing that can’t be molded with the hands, I’ve found that light is an amazingly emotional and powerful medium.

Q: You mentioned that we have outmoded ways of talking about color and light. Is this indicative of a larger issue?

A: This is a very primitive culture with light. We spend a lot of time designing architectural fixtures that hold the light, but we haven’t done a lot of work with light itself. In fact, there are many places where colors of light are less available than they used to be because of environmental questions such as the use of phosphors. You don’t have to be a chemist to have thousands of colors of paint available even in a small town like Flagstaff, but I can’t go buy a light that can dial through the entire spectrum from infrared to ultraviolet. We’re also primitive in our use of light itself. In

Photos: ©Tom McGrath



industrial lighting, for example, because of our concern for lighting efficiency, we’ve installed lights that deliver high lumen output, but aren’t very habitable for people. In some ways, we’ve gone in difficult and wrong directions, but I think it will change rather rapidly.

Q: How do you think it will change and from what direction?

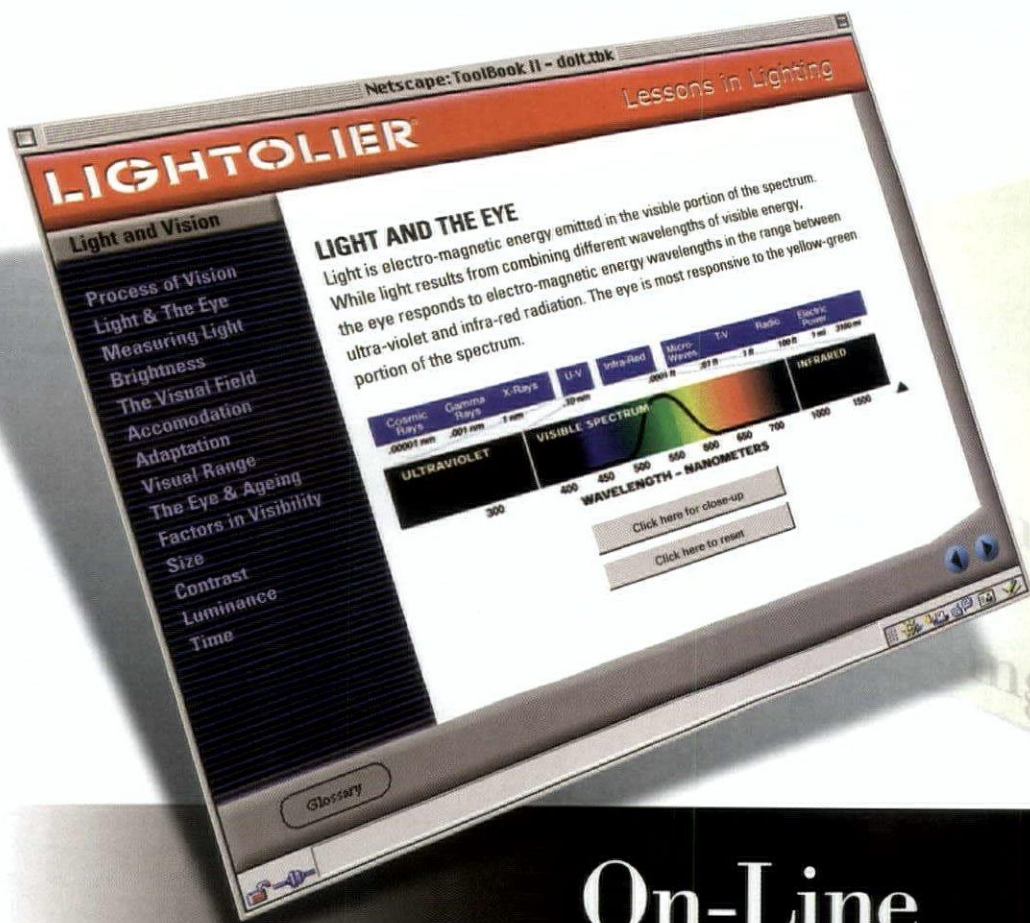
A: As with paint colors that have changed since the 1920s and automobiles and computers that have come

into the general public and public knowledge, this will also happen with light. Some people are quite aware that the sodium light we’re using is horrible and will want products that incorporate good design as well as efficiency. This is something that creates its own demand and demand creates change. And people who are involved in the lighting industry have to step up to a different level.

Q: The IES is moving away from having standards that are strictly footcandle-oriented.

A: Those standards are horrible. We’re not made for this light. The eye is almost completely closed. We’re made for very low levels of light. So the light that we use is nearly blinding. The standards are horribly inadequate and almost as bad as the 1950s’ standards for nuclear radiation. And light is also radiation—it burns us in terms of causing melanoma and cancers—but more importantly, we ruin the retina with the amount of light that we use. This industry really has to get its act together on this.

But of the criticisms I have, absolutely the first concerns the use of fluorescent light. Not only do we over light work areas and create light pollution with fluorescent light, but we use transformers that emit 60-cycle-per-second sound. When you



On-Line Education In Lighting.

Lessons in Lighting is a groundbreaking 19-part course in lighting that takes place completely on-line. The self-administered program covers everything from lighting fundamentals to luminaires, applications and even the lighting design process. Best of all, it can be easily completed at your own pace and on your own time.

Provided without charge as a service by Lightolier, the leader in lighting education, the program also offers CLC accreditation from the American Lighting Assoc. (ALA) and LU certification from the American Institute of Architecture (AIA) for successful graduates. For more information on how to participate in this state-of-the-art program, please visit www.lightolier.com or contact Earl Print at (508) 646-3103.

LIGHTOLIER®
Lighting that makes a difference.™

first come into an area equipped with these transformers, you'll probably hear this sound, but then after a while, you don't hear it anymore. That's because your brain is generating a 90-degree-out-of-phase brainwave to block out the noise. So you're actually tired just from being in the space. Electronic ballasts are better, but you can also use glass-pack transformers instead of paper-pack to reduce noise. These are the sort of aspects that we're subjecting people to in buildings and work environments.

We need to deal with issues surrounding our use of light. Light has always been used to illuminate other things, but now we're actually looking at light for the first time. Some interesting experiments are being done with defraction grading and interference patterns that pertain to the behavior of light. They've discovered that light exhibits one behavior when we're looking at it and another when we're not. This almost imbues light with consciousness. That it might be aware that we're looking at it is fascinating, but how we apply it to lighting a space is another matter.

Another recent experiment with different mediums has actually demonstrated the ability to stop light. It has no speed. You can really capture it. That's kind of amazing. With these experiments, we're coming to a place where we're going to have a remarkable intimacy and knowledge about light. And light will affect how we use it.

Q: I'm also interested in what your process is as an artist.

A: It depends on the project. While I've done several projects in theater and architecture, I generally work as an artist in the context of art, and with the pieces I create for museums and collectors, I try to make specific statements in art with light.

When I do work with architecture—buildings and interior spaces—each one has an individual context or direction that requires a different process, but I approach them from an art viewpoint. My primary interest is in what happens to our perception and in creating certain kinds of experiences and the quality of the statements made by these experiences, so you know you're in something special or in some space that's been done differently.

Q: When you're working on a project in a piece of architecture such as the passageway in the Museum of Fine Arts in Houston, how does the synergy work best in a collaboration with an architect?

A: For me, the tunnel at the Museum of Fine Arts in Houston is an art piece. I didn't really work with architects there because basically, they just gave me a tunnel, which is often the type of space that architects give up on. Tunnels are difficult spaces architecturally in terms of how one feels when inside them and only now are we beginning to realize that we need to do something with these closed-off spaces.

Artists and architects working together is a very delicate and difficult subject and has a lot to do with the specific architect and the project that they're working on. The collaboration with an architect only works if the artist is involved from the beginning. If you're just taking light into a space that's already built—that's not interesting to me. Since architects don't have a solid knowledge of light, the project is more interesting to me if I'm involved from the beginning. And with any collaboration, you also have to deal with the egos of the architect and the artist or the lighting designer. But generally, collaborative effort doesn't work too well and you can see that by how our buildings are today.

I don't think that architects are very familiar with light. It's not a material that they work with. They usually make their form and then install the lights, which is a terrible way to think about light. Light should be and will be a material we build with. Although this idea is catching on as evidenced by the nighttime use of light in buildings, often the lighting has little to do with a building's functions during the day. Some of the projects I've been involved with have to do with giving buildings another life at night.

Q: When viewers are inside a project of that type, their perceptual framework is different. How do you deal with the difference in your work?

A: For a medium as powerful as light, it's amazingly fragile to put together as a strong experience. Because any light that we make is like a flashlight in the noonday desert sun, I try to isolate light, create spaces that in some way apprehend or contain it for our perception. In that way, I do use or need form, but I'm making an architectural space to light. The idea is similar to when the sun lights the atmosphere and you can't see through it to the stars or when you have stage lighting on you from the footlights and the lights above and you can't see the audience, but the audience sees you. You're in the same architectural space, but in a very different visual space.

It's actually possible to stop visual penetration with where light is or isn't in relation to the person and to apply that phenomenon in the ordering of a space. This can be further altered by how you approach it. That is, if you step in front of the footlights, you see the audience and if you're behind them, they see you, but you don't see them. By doing this with color and light in any of its aspects, you can begin to create this other realm that we enter. It's not that different from sound or an amazing piece of music that can actually make a space bigger than it actually is.

This relates to how we construct reality and the world we inhabit. Psychological or perceptual cues can take us beyond the space that we're actually in, extend it so that we're in a space bigger than its physical dimensions. And this is the space that you actually inhabit.

This has always been the possibility of art or any discipline that takes us beyond the physical reality that people think we inhabit but don't. That's what so exciting about working with lighting—expanding a space to define it, making it new and different. A lighted building can be a princess at night and commoner during the day. Light has this power and we're gaining that ability to work with it.

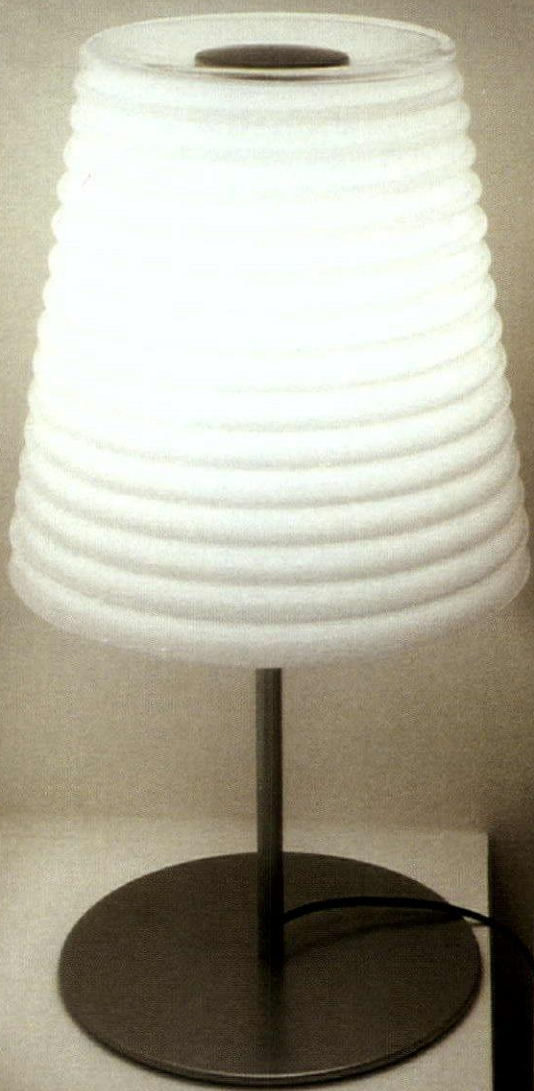
I know that we will build with light. We can use the limits of visual penetration to create privacy. For example, when you have your light on in your apartment and you look outside, it's black outside. But when you turn your light down inside, you can see out. So with this ordering of the penetration of vision, light can become a fundamental material to build with architecturally, and in that regard, you can make changes more cheaply with light than you can with physical architecture. At night, you can change your whole area and unite it with light, but to do that architecturally would mean a lot of materials and expenses, whereas it's fairly quickly and easily achieved with light.

Q: Going in another direction, I certainly want to talk about Roden Crater. Could you give us a background to the project?

A: Because I'm interested in all sources of light, to not work with sunlight, which is so available, would have been a big omission. But the Roden Crater also involves reflected light from the moon and planets. Our perception is quite acute in terms of light, so we can actually see our own shadow with the light of Venus alone. I

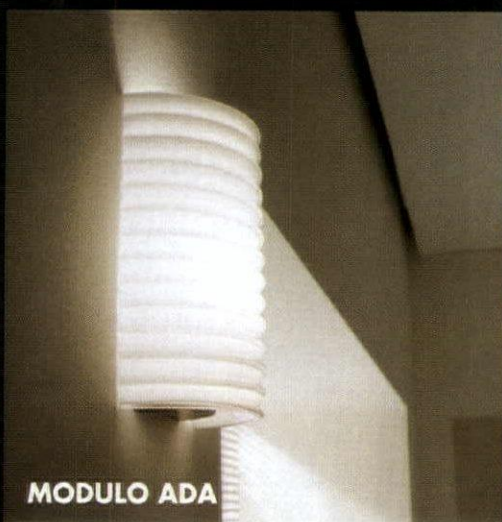
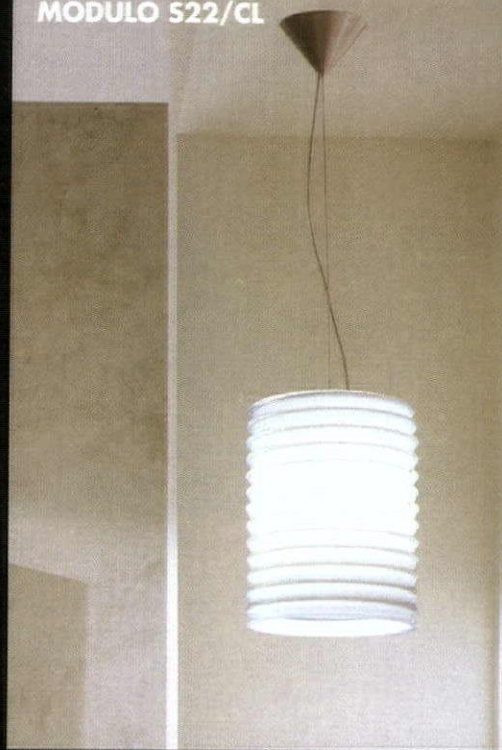
BRINGING ARTISTRY TO LIGHT

MODULO T31



LEUCOS LIGHTING

MODULO 522/CL



MODULO ADA

MODULO

design by R. Toso, N. Massari and Associates

LEUCOS USA INC.

11 MAYFIELD AVENUE EDISON, N.J. 08837

TEL (732) 225-0010 FAX (732) 225-0250

Circle No. 9 on reader service card or visit
lightforum.com/marketplace

like to work with these lower levels of light because it's when you reduce light that the eye opens and you no longer squint. The pupil opens and when that happens, feeling goes out of the eyes like touch, so we actually feel with the eyes.

The light at the crater is very interesting. After dark, you can see well enough to walk and negotiate spaces even on a moonless, starry night. I wanted to work with starlight as well because it comes from 180 degrees and has no shadow. If you eliminate the light from the ecliptic—that is, the light off the moon and planets and the sun—and light from the galactic plane—the Milky Way—you'd be looking into starlight that is more than 300 billion years old, older than this planetary system. It may be shifted slightly, but by isolating the light, you can confront it physically. The result is a different way of looking at and feeling light. You physically have a sense of it and a knowing of its origin.

Astronomy is this science of knowing a star without touching it. We really take what it gives, this light through remote sensing. And we really can know about it, because we can know what it is made of and what temperature it burns at just by virtue of its light. So there is this knowing in light. And we're beginning to have senses that understand that, which is exciting to me.

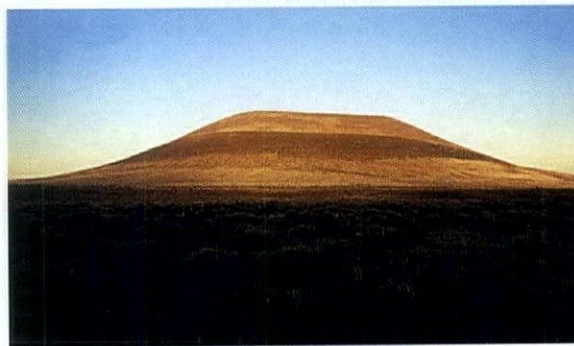
Q: At the crater, you have several chambers, each of which is directed to an observation of a particular celestial event...

A: It's different areas to gather light. I essentially create these spaces that apprehend light for a perception. They seemingly hold light and you feel its physicality. The reason there are a number of chambers is that anytime you direct light toward one specific thing, you necessarily occlude others. By isolating it, you make it stronger and notice it alone. The chambers are oriented to certain celestial events so that when they happen, you feel the light from that occurrence. The crater is like a space that plays the music of the spheres in light.

In a way, I'm creating a pre-made ruin. I'm interested in the timelessness of this project, but I don't know how long things will last. By using strong materials and cladding them with stone so they'll last longer, I have a chance. Most of this, though, depends on how the social organization goes. Right now, we're experiencing great advances in technology, yet at the same time, socially, we're going the opposite way. This culture is not necessarily going to last. When I was young, I thought that we'd be in a different place by now. I thought we'd be doing things like Egypt, Greece and Rome, where we're actually building a culture and producing the architecture and art that define this culture. We've never been richer than we are at present, but our funding for the arts has been continually reduced.

Q: The project's been compared to other spaces that have been used throughout history to observe celestial events. Did any of those places influence how you looked at the crater?

A: Newgrange, a somewhat primitive Celtic space, is directed toward the furthest southern sunrise or winter solstice sunrise. Then at Abu Sambal, the architecture accepts light at certain times and produces an event in light when that occurs. The idea behind the Roden Crater is that you have this opening and when the event occurs, light is brought in and creates an event in light in the space. But there are similar spaces that have done that for over 6,000 years—this is not a new way to think about our relationship to the space outside us.



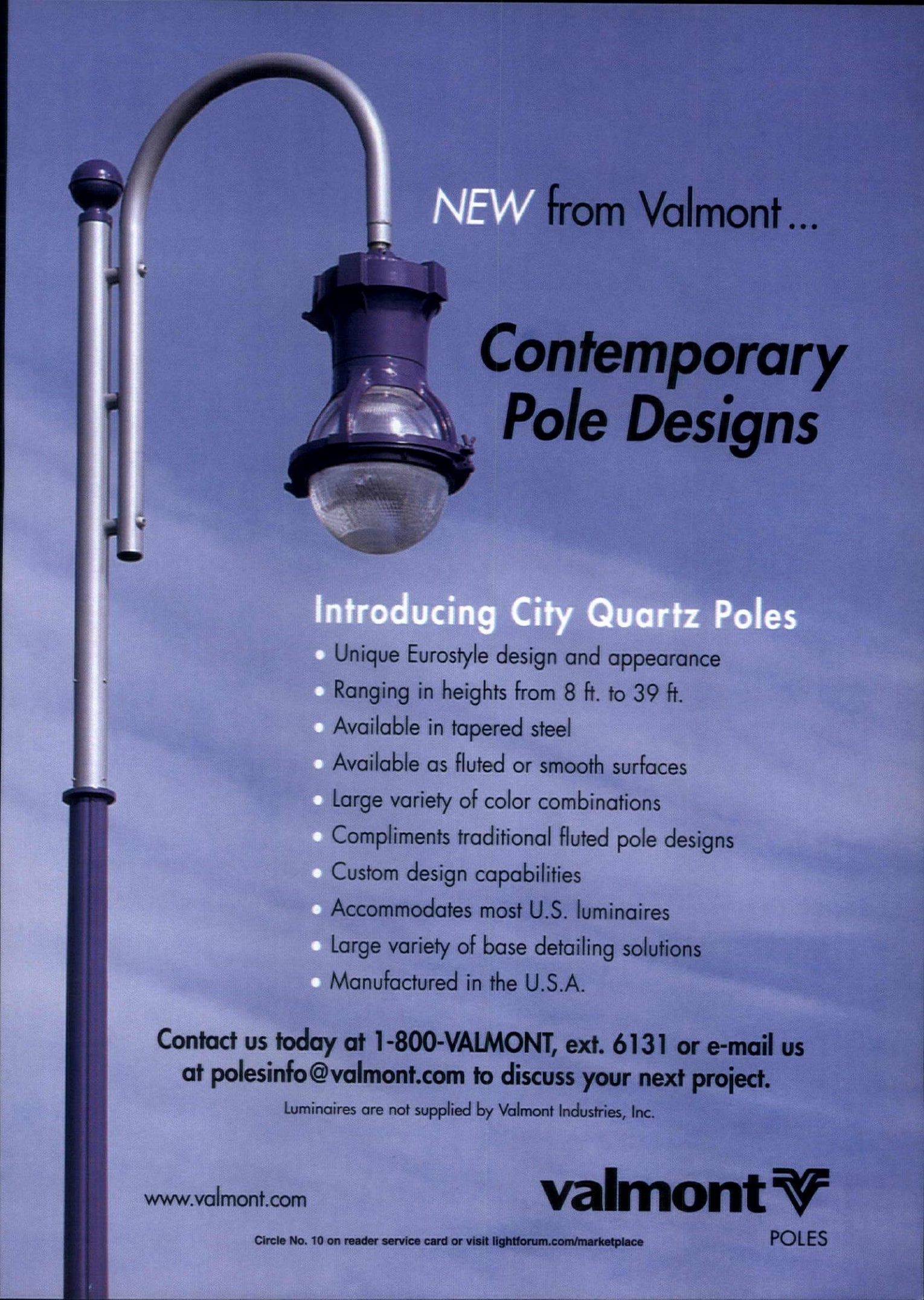
Q: In terms of the visitors' experience as they move from the exterior of the crater to its interior, where does the piece actually begin and where does it end?

A: Well, it begins with the journey and making the decision to go. A lot of the price of admission is about just the willingness to go to the crater. However, in creating the chambers, I was also interested in the idea of the relationship of inside to outside, which also relates to the way that the soul inhabits the body and the body inhabits the building. Even though we still might orient a kitchen to the morning sun, generally, these buildings that we inhabit often have little to do with the world outside. I want to thoroughly make the universe and certain celestial events enter the space, so that they're in there with you. For example, you'll have a 10-ft. image of the moon coming into a space 20 ft. underground. Through light, the chambers actually bring the universe that we think to be out there into the space and in doing so, extend that thought about how we inhabit these spaces. People talk about being in a place and having only 10 miles of visibility, but sometimes you look up at night and you can see 6,000 billion light years. Perception is actually different from how far vision extends and the territory we inhabit. The psychological territory we inhabit has a lot to do with our seeing into the universe and bringing it to life—into our life.

Q: How about time and the passage of time and the perception of that?

A: For me, that's a very interesting aspect. A lot of these spaces that I create in museums take time. It takes time just to adjust to the dark to be able to see them. At the Roden Crater, for example, some of the spaces are organized so that you have to go through a number of them to allow the eye to naturally dark-adapt. Some of my projects also change over time, as in the Sky Space at P.S. 1, where the piece actually evolves and develops as you watch it. But time is a construct and it's possible to create a different time and live in it. In relation to the crater project, by virtue of its being in the exposed geology of the Painted Desert, you're in a sense of time that differs from the constructions of mankind—you feel this geologic time.

Because perception is the objective, you have no object, image or place of focus. So what are you left with? Light, which becomes this magical realm. What happens is not that different from the experience of looking into a fire or a deer looking in the headlights of a car. We enter a state where we're not exactly thinking with words and then, we feel the primal power of light. Light is a powerful medium, but putting together the aspects of our feelings about it is fragile and delicate. Those are the ironies of working with light. And I'm sure that for all lighting designers and people who traffic in light, it is an amazing thing to work with. It's something that we don't easily touch and manipulate, but boy, is it powerful. ■



NEW from Valmont ...

Contemporary Pole Designs

Introducing City Quartz Poles

- Unique Eurostyle design and appearance
- Ranging in heights from 8 ft. to 39 ft.
- Available in tapered steel
- Available as fluted or smooth surfaces
- Large variety of color combinations
- Compliments traditional fluted pole designs
- Custom design capabilities
- Accommodates most U.S. luminaires
- Large variety of base detailing solutions
- Manufactured in the U.S.A.

**Contact us today at 1-800-VALMONT, ext. 6131 or e-mail us
at polesinfo@valmont.com to discuss your next project.**

Luminaires are not supplied by Valmont Industries, Inc.

www.valmont.com

valmont 

Circle No. 10 on reader service card or visit lightforum.com/marketplace

POLES

pre-conference may 29, 2001
las vegas, nevada

trade show & conference may 30 - june 1, 2001
las vegas convention center

LIGHTFAIR

international

12th annual

www.lightfair.com

2001

the lighting @vent for architecture, design, and engineering

Don't miss this once-a-year opportunity!



Visit our Website at www.lightfair.com and register online!



Return this card by **fax** to 708-344-4444 to receive a detailed brochure by mail!



Call 1-800-450-1106 (US & Canada)
or 708-786-4120 (International)



Return **Mail** to: LIGHTFAIR INTERNATIONAL 2001
c/o CompuSystems Inc.
P.O. Box 604
Brookfield, IL 60513-0604

FOR INFORMATION ON EXHIBITING, PLEASE CALL 404-220-2215.

Name _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Country _____

Email: _____

Phone (____) _____ Fax (____) _____

CODE A

LIGHTFAIR INTERNATIONAL is a global leader in the architectural & commercial lighting component of the built environment industry, providing the opportunity to experience new products, technology, services, product applications, and design solutions. Make plans **NOW** to join your global colleagues in Las Vegas, Nevada for LFI 2001...

- More than 17,000 architectural, engineering and design professionals representing the top firms in their industries;
- Over 450 leading-edge domestic and international manufacturers occupying over 1300 booths;
- An expanded Exhibit Hall featuring over 135,000 net square feet of the newest products, latest technology, and most up-to-date information;
- The world's largest architectural and commercial lighting Conference which takes place over four days, encompassing **eleven Workshops** and **27 seminars**, providing AIA, ASID, IIDA, IESNA, and NCQLP accreditation (upon association approval). Seminar Tracks for the 2001 Conference include: Lighting Design of the Built Environment; Energy & Technology; Lighting of Exterior Spaces; Building Blocks for Professional Development; Designing for the Future; Controlling the Source; Lighting & Health;
- The multi-media New Product Showcase & Awards Presentation, showcasing more exhibitor product introductions than ever;
- Exciting awards ceremonies and the BEST industry association events, which coincide with the largest LIGHTFAIR INTERNATIONAL Trade Show & Conference ever!



Sponsored by The Illuminating Engineering Society of North America



Sponsored by The International Association of Lighting Designers



Produced and Managed by AMC, Inc.



Official On-Site Event Directory

Hall of Fame

From legend to leader, these nine lives
have influenced us all

During the course of both our personal and professional lives, we are given chances to create change, to provide opportunity—or sometimes to leave a legacy. Often, it is not some monumental feat or intricate undertaking that impacts those around us, but rather something quite simple—positive attitude, passion for what you believe, love for what you do—that touches the lives of others.

Welcome to *Architectural Lighting's* first Hall of Fame issue. Our inaugural list of inductees is made up of leaders who have captured that spirit of “simplicity” and, in turn, have captured the fascination and respect of our industry. Our esteemed honorees have carved out careers that have inspired and aided this profession in a variety of ways—some through practice, some through education, some through innovation and *all* through enthusiasm for their trade. Each of these people has been instrumental in forming the foundation of professional lighting design and has lent guidance, provided wisdom and set examples that are timeless—shaping the industry as we know it today.

But how do you select nine from so many qualified and worthy candidates? This was a difficult task. There was no particular method to making our choices for the first *Architectural Lighting* Hall of Fame. But I can tell you this: It's not just about longevity or commitment; otherwise, we'd have to award scores of lighting professionals. The selection process for a “2001 Spot” was initiated by the people who know best: You. Nominations from our readership were solicited by a third party, Prescolite, the co-founder of this Lighting Hall of Fame, in an effort to establish a permanent recognition of lighting excellence and to celebrate the industry's rich history. And while our search started with you, we then presented the nominations to a small group of advisers—including Fred Oberkircher, IES, LC; Matthew Tanteri, IES; Gary Steffy, FIALD, LC; Renee Cooley, IALD; Teal Brogden, IALD—did a little research of our own and consequently, selected our final nine. Picking so few from many more-than-eligible candidates, both living and deceased, was nearly impossible, but we're sure you'll agree that the final nine are not only first-rate, but have imbued our industry with positive—and unparalleled—energy:

Howard Brandston, FIALD, FIES, LC; Lesley Wheel, FIALD; William Lam, FIALD; Motoko Ishii, IALD; Sonny Sonnenfeld, IES; David DiLaura, FIES; Abe Feder, FIALD, FIES; Edison Price; and James Nuckolls, IALD.

Architectural Lighting is honored to induct these nine people into our Hall of Fame. We hope that after reading their profiles, which begin when you turn the page, you'll find some of the anecdotes as insightful, and often humorous, as we did ... after all, they're not just professionals but personalities.

Architectural Lighting plans to continue this tradition on an annual basis—and you can help. Please submit your nominations for next year. Simply write in the name/names of the lighting designer/industry professional you believe should be honored and a couple of sentences explaining why. You can send your suggestions to *Architectural Lighting*, One Penn Plaza, 10th floor, New York, NY 10119, Attn: Hall of Fame; fax it to (212) 279-3955; or visit www.lightforum.com and cast your vote. Thanks for your valuable input. ■



Christina Trauthwein,
Editor-in-Chief

HOWARD BRANDSTON

Lighting Designer

Although Howard Brandston's boyhood dream was to be a tennis star, it's a good thing he chose lighting design instead. In his own right, Brandston has become a shining star—and guiding light—in this field.

Brandston studied theatrical illumination at Brooklyn College and began his career in lighting in the New York theater. Early on, he was a designer at several manufacturing and lighting design firms including Century Lighting, where he served as assistant to the legendary Stanley McCandless, who inspired much of his design and work philosophy.

"Good lighting is an agreement between the designer and the client at the beginning of every project," said Brandston. "The ultimate criticism is when, upon completion of the project, the guy who's paying the money says: 'This place looks precisely the way you told me it would.'"

Brandston also credits McCandless for teaching him to be careful and honorable with a client's money—"design and budget are synonymous"—and to respect each and every member of a team. "Working with Stanley, I realized that every single person who works with you is critical to the success of a project—from the principal designer to the client to the janitor," recounted Brandston. "Even Stanley, who was busy and famous at the time, was never 'too important' to answer his own phone."

The young Brandston soon had ample opportunity to answer *his* own phone when he set out to join—and conquer—the world of lighting design in 1966. With some borrowed money, Brandston established his practice in a small loft in Manhattan, sent out announcements and waited. "I was getting to be a pretty decent guitar player because I was there alone, playing, waiting for the phone to ring," said Brandston. "Then a lighting company called and said they needed a new line of fixtures and wanted me to design the optical systems."

The firm was Kurt Versen, which soon referred him to graphic designer Rudy DeHarak, whom he collaborated with on the flagship Canadian Pavilion at the Montreal Expo in 1967 and, later, the American Pavilion at Expo 1970 in Osaka, Japan. These undertakings soon led to even bigger projects, such as the design of the master lighting plan for what became the Meadowlands Sports Complex in northern New Jersey and eventually, to the lighting of the Statue of Liberty (shown).

In all, Brandston has more than 30 years experience in lighting design, engineering and electronics—designing illumination for more than 2,500 commercial, institutional,

residential and government projects—leading peers to credit him, with his portfolio of high-profile works, with elevating the practice of lighting design to a profession.

"I'm really a very plain person, though," said the lighting designer. "My peers would find that hard to believe because I fought so vociferously against different IES and ASHRAE standards ... and won. They were error-ridden and were not serving the public at large, which is what they were purporting to do."

A past president of the Illuminating Engineering Society (IESNA), he has addressed forums of the American Institute of Architecture (AIA), the IESNA, the Institute of Electrical and Electronic Engineers, the Producers Council, the United States Institute of Theatre Technology and others. He has served on committees for the National Academy of Sciences and was the IES representative to the Architectural/Engineering Federal Energy Committee during the Energy Crisis of the 1970s, which he has called "the best thing that ever happened to the profession." His work on conservation helped set the initial standards for lighting from 1975-85 and he was a founding member of the Ad Hoc Committee of Lighting Research and Education Funding Entities, Lighting Research and Education Fund and the Lighting Research Institute.

He has been a guest lecturer or visiting professor at many institutions including Ohio University, Cooper Union, Temple University and Washington University and was adjunct professor of architecture at Rensselaer Polytechnic Institute where he worked at the Lighting Research Center. In 2000, Brandston also held the Feltman Chair in Lighting and was adjunct professor of social sciences and humanities at Cooper Union.

His articles have been published in more 70 publications and his light sculptures have been shown in art galleries throughout the U.S. and are permanently installed in museums and university collections.

When all is said and done, though, people "know me for my dedication to this profession, even when I was known more for my dissent," said Brandston.

Brandston, who admittedly has "no complaints about his career" shared, "The one thing that I would still hope to accomplish is to be the person, either through teaching or mentorship, that gives somebody the leg-up to do better than I did—to grow beyond me." ■

—Phil Tamulonis

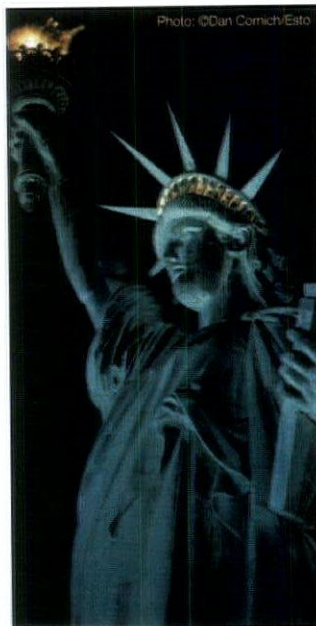


Photo: ©Dan Cornich/Esto

LESLEY WHEEL

Lighting Designer

A German major in college, lighting designer Lesley Wheel had once aspired to a life in foreign service. "But I found the people boring," she said. "So when it came time for me to choose a career, I asked myself, 'Where do I find the most interesting people?'" The answer was in theater. Stimulated by the friends of her sister, an actress, the 21-year-old took up lighting as a way to further her career in stage managing. "Nobody wanted to do lighting, so I would fill in and do it," she said. "I became good at it and slowly, it dawned on me that I had a career."

One of her first jobs was at the New York City Ballet. Since the Ballet's sparse budget meant it could rarely afford sets, Wheel—under theater lighting great Jean Rosenthal—learned how light could compensate for an empty stage. This experience as well as others would prove useful when she made her transition to architectural lighting and especially to illuminating night clubs, her initial training ground. "In cabarets and night clubs, there usually wasn't much scenery and the lights had to do what the scenery would be doing," said Wheel. "I learned a lot about color and the effect of light and angle on emotions." Although she supplemented her training with IES classes, which according to Wheel, were more oriented toward engineering, it was seeing Richard Kelly's work on the Seagram's Building in New York City that showed her the possibilities of lighting design. "It was the first time I saw light used as pattern. He had created a band of light all around the building with narrow beam spots," she recounted. "It was brilliant—it blew me away."

Today, Wheel herself is also regarded as nothing less than brilliant. A major force in interpreting the principles of theater lighting design into architectural lighting, she was the first—and for many years, *only*—woman to practice full-time in architectural lighting design. In 1961, she co-founded the firm Wheel-Garon Inc.—which later became WGS—and subsequently served as principal designer and CEO for 37 years. "It took me eight years in theater to find out where I belonged," said Wheel, "but once I got started in architecture, I knew that I was in the right place." During Wheel's tenure as CEO, WGS was the premier office for hospitality design and lighted more than 70 hotels for Hilton International, in addition to designing for all the other major hotel companies. WGS also designed the interior and exterior lighting for well-known commercial corporate headquarters.

On her 30th anniversary, her business partner, Don Gerztoff—who had since replaced Garon—congratulated her with an ad in a lighting magazine celebrating three decades in lighting design. "It was so unlike him because he was the most unsentimental man," said Wheel. "But it was really a wonderful thing." To this day, the advertisement is her most cherished professional possession.

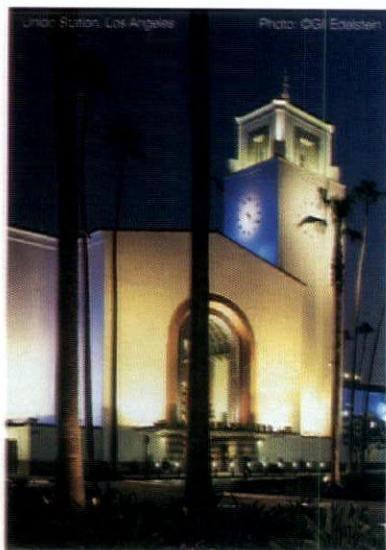
Wheel is known for her skill in creating warmth and intimacy through light, while searching out the beauty and grandeur inherent in architectural spaces. She received an IALD Award of Excellence for the Willard Hotel in Washington, D.C. and for the Omni Netherland Hotel in Cincinnati, OH and an IALD Citation Award for the lobby of the Guam Okura Hotel.

A founding member, Fellow and past president of the International Association of Lighting Designers (IALD), Wheel received the Designer's Lighting Forum (NY) Honor Award, the fifth such person so recognized, and in 1999, was the first lighting designer to receive the IALD Lifetime Achievement Award. One of her proudest accomplishments has been the founding of the IALD Internship Program, which has helped young designers realize their dreams.

Although retired since 1999, she continues her work in education, serving as director of both the Nuckoll's Fund for lighting education and the IALD Education Trust Fund. She is also on the board of the local sections of the Designer's Lighting Forum (DLF) and the Illuminating Engineering Society (IESNA).

Wheel earns a place in the annals of lighting design for expanding the profession through her tireless industry efforts, her long and outstanding support of the IALD and her exquisite works. Colleagues continue to praise her clarity of imagination, which not only helped create the IALD and DLF, but continues today to inspire the Nuckoll's Fund and the IALD Education Trust.

When asked to provide some words of wisdom to young designers entering the profession, she offered, "Have fun." "One of the great joys in life is to be gainfully employed in something that you're good at and that you like very, very much," she said. "I've always loved working with light. When I think about how many people have to do drudgery, I feel I've been blessed beyond calculation." ■



—Phil Tamulonis

WILLIAM LAM

Lighting Designer

Want to learn more about William Lam? Look for our interview with him in "Profiles" in the April 2001 issue.

Near the end of his career, but not yet retired, Bill Lam, in his own words, is still eager to meet the challenge of another project. But he is more than satisfied at what he's already accomplished. And his achievements are many. "In looking back over my life, I think I've done some good design," said Lam. "Projects I've worked on as part of a team have received many awards." But more important than the actual projects he has designed is the contribution he has given to the field of lighting design in the form of influence: From the books he's authored to the role he played in "getting rid of the design-constraining numerical standards," as Lam so directly noted, "I think that I've helped to lay the foundation for my profession, and that's a good feeling." And indeed Lam has helped to create the lighting design profession as it is known today. A pioneer in the field of lighting design and consultation, Lam has enjoyed a career that spans more than 50 years as a designer, consultant to architects, teacher and author.

Lam was born in Honolulu, Hawaii 77 years ago. After serving three years with distinction in the U.S. Army Air Force as a B-25 pilot, he earned a degree in architecture from the Massachusetts Institute of Technology (MIT) in 1949. Unintentionally, his entry into lighting design stemmed from an interest in the work of noted Finnish architect/designer Alvar Aalto, who has been considered a master of functionalism. "I designed a lamp for myself," said Lam. "People were admiring it and seeking to obtain one—and the rest is lighting history."

Lam founded the firm of William Lam Inc. in 1951, now Lam Lighting Systems, to manufacture these glare-free floor lamps and other products that immediately won a number of 'Good Design Awards' from the Museum of Modern Art. However, after eight years as company president, Lam resigned to return to his original calling—architecture.

He founded the firm of William Lam Associates, Consultants—Coordination of Lighting with Architecture and Urban Design in 1959 and for the next 40 years, won acclaim for notable projects including the Tennessee Valley Authority Headquarters complex, government centers in Quebec and Vancouver, Union Station restoration in Washington, D.C. and the San Diego Convention Center. But more than the awards, projects and publications, Lam considers his nearly single-handed battle with the light and power industry against their unjustified promotion of ever-increasing light levels and energy use as one of his career highlights.

The long-running and public battle with the Illuminating Engineering Society (IES) began in the early 1960s and ended during the energy crisis of the '70s. "Quality not quantity" was Lam's battle cry. He related that at the time, the IES arbitrarily set high lighting levels at the expense of good design. Said Lam,

"I wanted the emphasis on quality, judgment and common sense rather than numbers." More footcandles usually led to more glare and worse environments.

This is characteristic of Lam's practical design philosophy, which places the emphasis on having a vision.

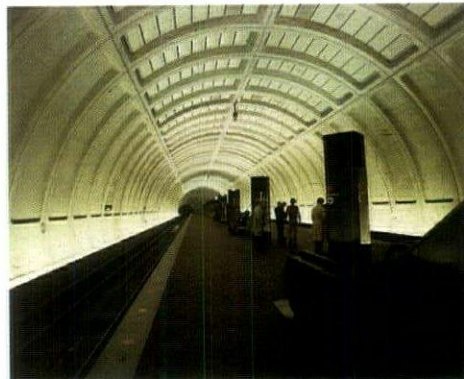
"Lighting is about design and not engineering," Lam shared. "Engineering is the last thing you do... If you know what a good environment is, you can create it. Lighting is applied perception psychology. You have to know what makes a good environment." As a result of his crusade, the light levels once recommended by the standards committee have been reconsidered and lighting design, no longer compelled to fulfill what Lam would term "ridiculously high requirements," has evolved into the kind of design we have today: A combination of ambient lighting with task lighting. One can say that Lam was critical in changing the way we now "perceive" our environment.

Lam's works integrate lighting with architecture and urban design. His approach to lighting design is based on the conviction that lighting is part of the architecture and results from the integration of all design elements. This is what he has taught in his lectures at universities including Harvard and MIT and in his writings. "What motivates me is designing buildings from the inside out. It's creating a space that people want to live and work in," explained Lam.

His books *Perception and Lighting as Formgivers for Architecture* and *Sunlighting as Formgiver for Architecture* have become definitive references for many students of architecture. Yet, Lam's influence goes beyond his students to reach clients, government officials and the many people he has worked with on various projects—particularly his desire to "work as part of an interdisciplinary design team where all members come together and a concept is created," according to Lam.

One of the finest examples of this collaborative approach is the Washington Metro System. For this project, Lam collaborated with Harry Weese-Architects and DeLeuw, Cather-Engineers. In Weese's letter of recommendation to the American Institute of Architects (which bestowed Lam honors in 2000), he wrote: "In a field which is peopled with all manner of experts, mountebanks and stage lighting experts, Lam is one of the few who combines a respect for the scientific method, aesthetic judgment and a penchant for elimination of cant. He does not go by the book, he sets standards rather than follows them." ■

—Marcelline Santos-Taylor



MOTOKO ISHII

Lighting Designer

Although Motoko Ishii deserves legendary status for her lighting design artistry, her noteworthy accomplishments reach beyond the scope of her lighting projects. Pioneering businesswoman, savvy marketer, educator, public speaker and author are also shining facets in the jeweled crown of Ishii's extraordinary career.

The bridges and outdoor plazas, hotels and temples, corporate environments and fantasy light shows on her roster of completed projects reveal Ishii's insatiable appetite for diversity. A hallmark of her technique is the seamless integration of complex and often innovative technology with a resulting visual aesthetic that succeeds in adding personality and dimensionality to the original structures.

Ishii was one of the first designers to extensively use colored light in outdoor applications. Her designs are often imbued with a deepening layer of symbolic meaning that provides a rationale for the lighting design and connects landmark structures intimately with the surrounding environments.

Though a pioneer of lighting design in Japan, Ishii's perspective is international. After graduating from the Tokyo University of Fine Arts in 1962, she left her native country to work in the Design Section of light fixture company Oy Stockman-Orno Ab in Helsinki, Finland and later, with Firma Licht im Raum, a lighting design firm in Dusseldorf, Germany.

In 1968, she established Motoko Ishii Lighting Design Inc. in Tokyo. Public recognition of her extraordinary talent was almost immediate—in 1969, she received a prize from the Illuminating Engineering Society of Japan for the Diffusion of Lighting project. Many domestic awards followed, such as the Illuminating Engineering Society of Japan's Japan Lighting Award and the Tokyo Metropolitan Prize of Culture from the Tokyo Metropolitan Government. Ishii has also received numerous international awards, including more than 30 awards from the Illuminating Engineering Society of North America (IESNA).

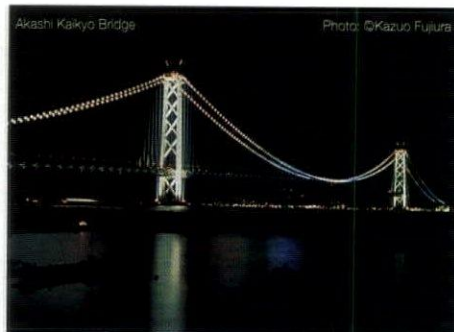
Establishing a lighting design firm in itself is not so unusual an achievement. But Ishii started her business in a profession dominated by men during a time when Japanese culture believed that a woman's place was anywhere but on a construction site. Ishii has spoken of being treated as an assistant, rather than being respected as the company owner, on all too many job sites early in her career.

Ishii not only persevered, but promoted her accomplishments at a time when sophisticated marketing by a small business was not yet commonplace. *Light Sensor*, the full-color annual publication that details her company's

lighting designs, debuted in 1979 at 12 pages. "But in those days," Ishii wrote in *Light Sensor 2000*, "it was still unusual for a small private office to publish a collection (of work), so it was passed around and attracted attention. Since then, the number of pages has increased to 16 then 24 then 32 and the fact that the publication has been continuously produced in-house since its inception is impressive."

Ishii has also authored three books detailing her designs: *Design for Environmental Lighting*, *My World of Lights* and *Light to Infinity*. Documenting and publishing her work early on allowed Ishii to grow her reputation well beyond the borders of Japan and it dovetailed with the establishment of her offices in other countries as the market for lighting design grew around the world.

Currently, Motoko Ishii Lighting Design Inc. maintains offices in Tokyo, Los Angeles and Paris.



Light Creation Inc. is a division of Motoko Ishii Lighting Design with the mission of realizing, as its website states, "a 'kinder' and better lighting environment by undertaking lighting engineering, the development, planning, production, installation and post-installation service of lighting hardware using the latest technology."

This testing and development arm is only one way in which Ishii pushes the envelope of lighting in a proactive way.

Ishii contributes to lighting education by presiding over the "Inter Light Forum" in Japan established for the purpose of fostering the interdisciplinary study of light. She also sits on various government committees in Japan, including the Ministry of Construction's Architectural Council, the National Land Agency's Council and the Science Technology Agency's Council for Aeronautics & Electric Technologies.

Motoko Ishii has expressed a love for light with extraordinary grace and professionalism throughout her career. "Light has existed since the beginning of the world. Then man was born and he, in turn, created civilization and culture by the grace of light. Light is beautiful. It is also entertaining. It affects all areas of our lives, from religion to technology to art."

"I have taken the road of designing light," she wrote in her book, *Light to Infinity*, published in 1991. "In the 21st century, which is as close as tomorrow, I look forward to the development of ever more beautiful, ever richer light." ■

—Wanda Jankowski

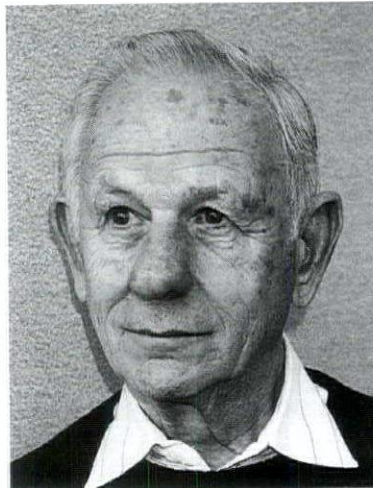
SONNY SONNENFELD

Industry Professional

Like many in the industry, Sonny Sonnenfeld traces the beginning of his professional life to the theater—more specifically, a rainy day in social hall at summer camp.

“I was 12 or 13 years old and this guy asked me to help him move a piece of scenery to the stage,” recounted Sonnenfeld. “I guess I moved it so well that he asked me if I’d come back in the afternoon to help him.” And thus began a 50-year career that has straddled the worlds of theater and architecture and brushed shoulders with some of lighting’s most respected names.

Sonnenfeld’s early experience seemed to foretell a life on Broadway. From summer camp, he went on to stage-manage at a Jewish community center and later, the 92nd Street Y, where he became technical director in 1940, following in the footsteps of lighting designer Abe Feder. After serving in the army, he returned to New York with the dream of becoming a Broadway stage manager and received his big break when he interviewed with famed Broadway producer Kermit Bloomgarten for the position of assistant stage manager. He was turned down on account of his distinctively New York accent. “According to equity rules at the time, the assistant stage



manager and assisted architects in the lighting of their projects, many of which were department stores.

“You have to remember that when I started selling at the end of 1945, there were very few independent architectural lighting consultants,” said Sonnenfeld. “The manufacturers, reps and salesmen did a great deal of the architectural lighting design.” As training, he visited different stores, stopping at each floor to ask himself, “If my father owned this store and I could do anything I want with the lighting, how would I light it?” Said Sonnenfeld, “Sometimes, it took me

three hours to go through the entire store, but in the meantime, I had relighted every department. It was a good teacher for me because I could draw on that visual experience when working with clients. I recommend it to all lighting salesman. Look at the lights, see what they’re doing, not just what they are. Visualize the space as a whole.”

After Century, he and three others formed Lighting and Electronics, an architectural and stage lighting manufacturer. The company filed for Chapter 11 in 1965 and Sonnenfeld left to become a manufacturers’ representative for companies like Architectural Lighting and Daybrite McPhillben Omega, with whom

“It’s important that you make friends out of customers because all things being equal, a customer wants to do business with friends.”

manager could have a walk-on part and speak up to three lines,” said Sonnenfeld. “The role for the assistant stage manager in the play was a deputy sheriff and I couldn’t act like a deputy sheriff from the South with my accent.”

The decision proved a turning point, as Bloomgarten sent him to Century Lighting, where he met owner Edward Kook and the head of R&D, Stanley McCandless. Sonnenfeld jumped at the chance to work with McCandless, who “wrote the bible on stage lighting” and who was considered one of the first independent architectural lighting consultants. Under McCandless, Sonnenfeld learned the aesthetics of architectural lighting while helping to develop architectural and theatrical lighting fixtures. Kook and Jim Fedigan, executive VP at Century, taught him the art of the sale.

Sonnenfeld’s “tutelage” lasted 16 years, during which he rose to the position of New York sales

he served as New York sales manager for a short period of time. After operating his own rep agency, he was hired by Electronic Theatre Controls and continues to work as a consultant to the development of theatrical lighting fixtures and architectural dimming systems.

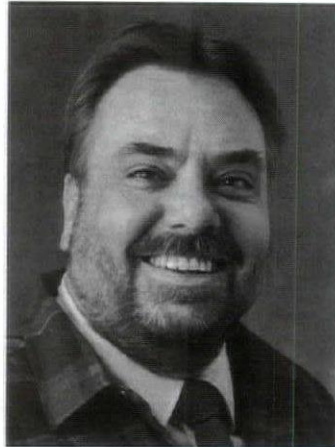
A IESNA member since 1952 and U.S. Institute of Technology fellow, Sonnenfeld has written extensively on theatrical and architectural lighting and participated in numerous lighting-related committees. In 1992, as a way of giving back to the theater that had nurtured him professionally, he started Broadway Lighting Master Classes, a four-day seminar on theatrical lighting design, and enlisted lighting designer and friend Jules Fisher to serve as creative consultant and assemble the faculty. The program now draws more than 100 people from all over the world and according to Sonnenfeld, is “one of the best things that I’ve done—that and my son.” ■

—Alice Liao

DAVID DILAURA

Educator

“I don't know where the next generation of lighting instructors is coming from,” said University of Colorado's David DiLaura, who is currently the senior instructor in the department of civil, environmental and architectural engineering. “The industry is going to get caught short in five years as the number of those who are prepared to educate lighting people begins to dwindle. We don't have a good mechanism for bringing a new generation of lighting educators along and that's a long-term difficulty that we face.”



Helms and assuming full-time responsibilities for the undergraduate illuminating engineering program. At the same time, DiLaura had left Smith Hinchman & Grylls to start his own lighting engineering consulting company, Lighting Technologies. “It was time,” he said. “I was eager to provide software for other lighting engineers.” He gave up daily management of his company in 1994, when he was named senior instructor and went on to serve as interim associate dean for academic affairs and from 1996-98, as associate chair.

With most programs at major universities being headed by a single person and because universities require that faculty members have a Ph.D.—and “there's no such thing as a Ph.D. in lighting”—the future of undergraduate lighting programs seems questionable. “That's the trouble with these one-man/one-woman outfits: When something happens to that person, that's it,” he explained. “And I don't know of anyone in any Ph.D. program now who's prepared to go into lighting.”

DiLaura became interested in lighting in 1966 when he worked part-time for a small engineering firm in Detroit. There, he encountered electrical and lighting engineer Stephen Squillace, who inspired

In his 20 years at the University of Colorado, DiLaura strove to develop a lighting program that provides students with a thorough theoretical foundation to lighting engineering, equipping them with a solid understanding of such basics as lighting calculations and the inner-workings of electric circuits. Undeterred by the criticism of industry members who, 10-15 years ago, wanted new graduates to be immediately profitable, DiLaura has persisted in his vision with the belief that “students who have a solid grounding in fundamentals are life-long learners. When new technology comes along, they'll be able to pick it up.”

A Fellow and medallist of the Illuminating Engineering Society (IES), DiLaura has received numerous teaching awards, but now, with retirement in

“Students who have a solid grounding in fundamentals are life-long learners.”

him to pursue a career in lighting. “He was my teacher and mentor,” said DiLaura. “I worked for Steve for many years.” After receiving his B.S. in physics from Wayne State University in 1970, DiLaura helped Squillace establish a lighting group at the architectural engineering firm of Smith, Hinchman & Grylls, where he would continue to work for the next 10 years, rising from principal researcher to chief illuminating engineer and eventually, an associate of the firm in 1980.

The year 1970 was also when DiLaura made his first foray into lighting education. Ronald Helms, then an instructor at the University of Colorado, invited him for a six-week stay as a guest lecturer in lighting engineering. “That was my first official teaching function, but because teaching has a great deal of theater and I'm such a ham, I enjoyed it very much,” said DiLaura. In fact, the experience proved so enjoyable that he would return every autumn as a visiting lecturer for the next decade. After his “long apprenticeship,” DiLaura was appointed associate professor adjunct in 1981, taking over for

sight, he is troubled by the longevity of this and other programs in the U.S. “After I retire, Bob Davis will be here by himself,” said DiLaura. “That will be a setback for our program because I don't see anyone getting ready for him to hire.” While his path to his present position has been one of “coming through the backdoor,” university hiring practices have become more restrictive since then. According to DiLaura, the solution may lie with a shift in hiring policies and increased industry participation. Although he applauds the industry for their involvement in the school's successful internship program, more support is needed in the training of future lighting educators. “In most other disciplines, industry manages to support the educational activity of the country: Unfortunately, this has not happened in lighting,” said DiLaura. “Companies, whether a manufacturer, engineering firm or designer, need to align themselves with a school and really understand its program. And finally, they need to provide funding or they're going to find that there won't be anyone to teach the people they want to hire.” ■

—Alice Liao

ABE FEDER

Lighting Designer

Once you met Abe Feder, you could never forget him. His brash and burly exterior manner was juxtaposed with an "interior" marked by the keenest of minds and the gentlest of spirits. Geniuses should be unforgettable. And Abe Feder, FIES, FIALD, was a genius of light.

In his hometown of Milwaukee, WI, the 14-year-old Feder watched, awestruck, the stage performance of Thurston the Magician. It wasn't the magic tricks that enraptured him. It was the lighting that became the "magic" for Feder.

He studied theater craft and lighting at the Carnegie Institute in Pittsburgh, but left at the end of the second year because there was nothing more for him to learn. Instead, he worked as a lighting designer at the Goodman Theater in Chicago and then was drawn to the center of the theater world, New York City.

Feder's creative lighting designs for the 1930s' Federal Theater Project productions are as legendary as the stories he used to tell about working with the project's directors, Orson Welles and John Houseman. In the production of *Dr. Faustus*, Feder made actors magically appear and disappear using light and darkness and cylinders of black velvet. *The Cradle Will Rock*, *The Skin of Our Teeth*, *I'd Rather Be Right*, and *Macbeth* were a few of the productions that allowed Feder to gain prominence experimenting with theatrical lighting techniques.

Keep in mind that, at that time, the abundance of lamps and fixtures commonplace today did not exist. Here was a brilliant man in the right place at the right time. Feder came on the scene when the lighting profession was in its infancy and lighting equipment was primitive. His innate inventiveness and curiosity, ever-present throughout his career, led to the development of a wealth of new lamps, fixtures and lighting techniques that eventually became industry standards.

During World War II, while an Air Force Sergeant, he designed the lighting for *Winged Victory*. When the theatrical production caught the attention of moviemakers, Feder had the opportunity to go west and break into film lighting. Hollywood's loss was New York's gain. Film lighting was too "flat" for Feder. He wanted to render designs in all their three-dimensional glory.

The 1950s and '60s were boom times for Broadway and Feder was at the heart of it, designing lighting for hits like *Inherit the Wind*, *The Boy Friend*, *My Fair Lady*, *Camelot* and *On a Clear Day You Can See Forever*.



In search of greater challenges, Feder turned to illuminating architecture and became the first independent theatrical and architectural lighting designer. His firm, Lighting By Feder, designed the systems for some of the country's most prestigious projects. Feder counts among his credits lighting designs for the United Nations, the Philharmonic Hall at Lincoln Center, the terminal plaza of Kennedy International Airport, the Kennedy Center for the Performing Arts in Washington, D.C. and Rockefeller Center in New York City (shown).

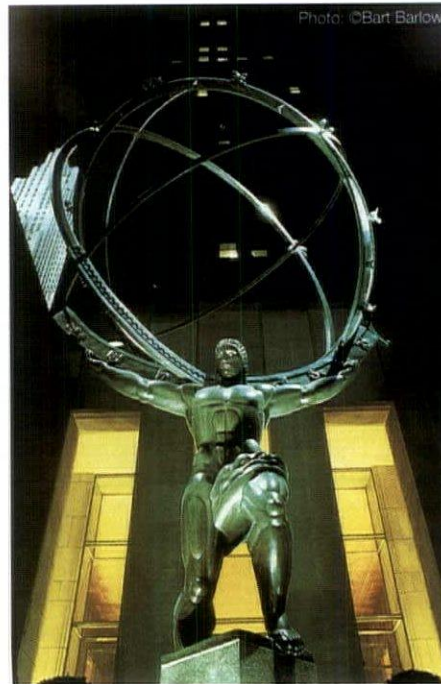
When the lighting design profession began to mature and organize, it was fitting that the honor of being the first president of the International Association of Lighting Designers (IALD) should fall to Feder. In 1996, Feder was inducted into the Theater Hall of Fame in New York City—long overdue.

Throughout his extensive career, Feder never lost what he called "the sense of wonderment" about light. To most people, light is an intangible that allows them to see without it being "seen." Feder had said, however, that to him, light was tangible; that was the way he "saw it." And lighting design was aptly summed up by him as "the art of revelation."

"Light isn't bricks, it isn't steel," Feder wrote. "There's an effusiveness in the light material. And I've been privy to that, as I've seen it evolve over a period of 50 years. The breakthroughs into the secrets of light are just beginning and that's an ingredient in designing lighting, for exteriors and interiors, that can't be ignored."

Feder always looked forward. He would have been honored to be a part of this Hall of Fame. His legacy, however, lies within each lighting designer today who shares his sense of wonderment about light and who strives to push the medium forward to the day when, as Feder had hoped, lighting will "break out of the bulb."

—Wanda Jankowski



EDISON PRICE

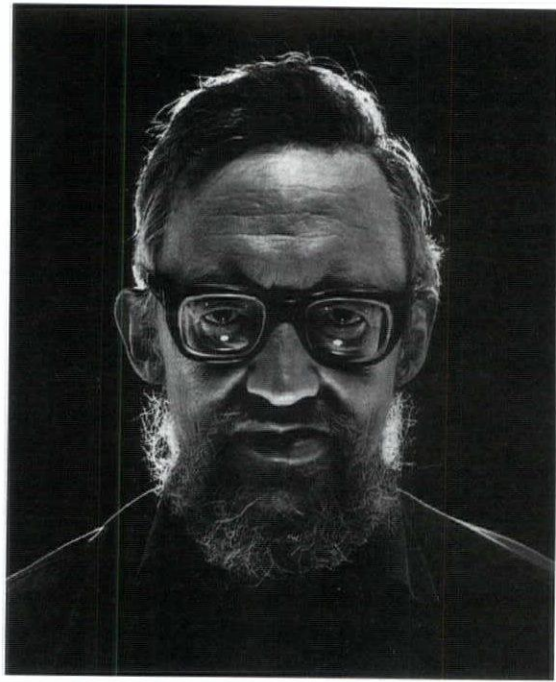
Industry Professional

It is telling that Edison Price's trademark downlights and accent lights illuminate many of the world's great works of art. The inventor-engineer-designer is regarded today as somewhat of an old master himself. And like Rembrandt and Hals, he was among the first modern practitioners of his craft. With shadow and light, he could give a grand gallery the human contours of a Dutch tavern.

Price particularly favored restrained, low-brightness lighting that mimicked that of the natural world and developed a number of glare-free fixture types that have since become industry conventions. Recessed and track lighting are two of the best known innovations with which he has been credited.

The aptly-named Edison was born in Manhattan, the eldest son of theatrical lighting designer, William Price, who died when Edison was only eight. At 17, he joined Display Stage Lighting, the firm his father had founded and his mother continued to run. With no money for college, he learned the trade by studying technical journals published by the Society of Illuminating Engineers.

After 15 years, Price sold his share in the stage lighting company and in 1952, with \$2,500 borrowed from a friend, set himself up as an independent designer and manufacturer in a rented, 1,000-sq.-ft.-loft located on Centre Street in Manhattan. With the help of John Mitchell, whom he met in a bar and later hired, Price began to fabricate, assemble, pack and ship his inventions, the first of which was a new kind of recessed silver bowl lamp downlight. Specified by Eleanor



Mies van der Rohe's Seagram Building and bathed Philip Johnson's Four Seasons restaurant in light. His lights illuminate over 250 museums worldwide, including the Museum of Modern Art and the Whitney Museum in New York, the Louvre in Paris and the Kimbell Museum in Fort Worth. In 1981, the American Institute of Architecture conferred its AIA Medal on Price in recognition of "one who has brightened more excellent architecture than anyone else in history."

Price preferred to approach each project

"A lighting designer's best friend," Price was known for offering a manufacturing facility that actually answered to the customer's needs and wants.

LeMaire for the original Neiman-Marcus store in Dallas, the downlights were functional and efficient, incorporating a no-nonsense design philosophy that would be applied to all of the company's fixtures. In 1955, Edison Price Lighting moved to 238 East 44th Street and four years later, relocated to its present quarters at 409 East 60th Street. The company expanded to include arguably the world's first lighting consultancy, which provided assistance to specifying customers on proper fixture installation and application.

Price's functional, less-is-more approach endeared him to the arrivistes of the new International Style, to whom he quickly became a frequent collaborator and confidant. Over the years, he worked with many of architecture's giants, contributing to the projects of Marcel Breuer, Louis Kahn and Buckminster Fuller. He worked on I.M. Pei's National Gallery in Washington, D.C., fashioned curtains of light on the lobby walls of

individually, for many years frustrating management by declining to publish a catalog or sell to those whom he felt would use his products in bad taste. In 1989, Price resigned from the company he founded, leaving it to be run by his daughter, Emma Price. He subsequently founded Nulux in Brooklyn, where he continued to design specialized lighting.

Today, the special care Price took with each project is remembered by those in the industry. Called "a lighting designer's best friend," he was known for offering a manufacturing facility that actually answered to the customer's needs and wants.

In 1990, Price was honored with the Illuminating Engineering Society's (IES) Richard Kelly Lifetime Achievement Award for his contribution to the industry. Price died in 1997, on the night the Metropolitan Museum of Art opened a photography gallery lit by his latest miniature fixtures. ■

—Phil Tamulonis

REMEMBERING ...

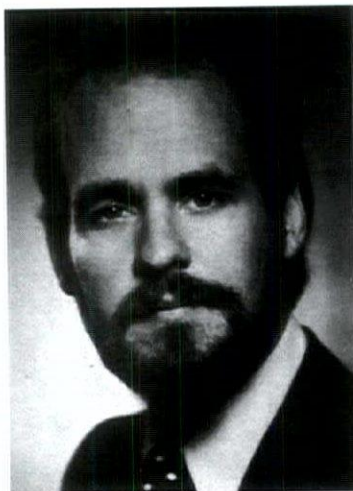
JAMES L. NUCKOLLS

Educator

James L. Nuckolls occupies a singular place in the history of architectural lighting. Though a lighting designer of note, his greatest impact was as an educator. He took the message of the importance of lighting as an integral component of architecture and interior design across the U.S. to those in allied professions and to students just starting out.

His career began during graduate student days at Carnegie Mellon University with an interest in theatrical lighting design. After graduation, he worked briefly under Stanley McCandless at Century Lighting but soon gravitated towards the developing field of architectural lighting. From the late 1960s through the '70s and '80s, he was involved in lighting design partnerships with Donald Gersztstoff, William Warfel, Jeffrey Milham, Carroll Cline and Francesca Bettridge.

At the same time, Nuckolls—probably more than anyone else—worked to promote an understanding of architectural lighting as a discipline. He was a dynamic speaker and his passion for lighting and education inspired countless people throughout the country to recognize the essential connection between lighting, architecture and interior design. His inspirational manner of presenting lighting can account for the line that opens the resumes of many of today's top professionals: "I took a class on lighting at Parsons with Nuckolls and..."



colleagues have commented that if it can be said that the lighting design profession started in New York City, then it is equally true that Nuckolls started lighting design at Parsons.

In addition to teaching and public speaking, Nuckolls was instrumental in the establishment of the International Association of Lighting Designers (IALD), which he, along with other founders, saw as a needed resource and forum for the growing profession. He was IALD president for two years during its early years and active on numerous committees throughout his career.

A sought-after writer for many trade magazines, he was the first lighting editor for *Interiors* magazine. His book, *Interior Lighting for Environmental Designers* was published in 1976 and quickly became a definitive text in lighting and interior design courses across the country. The second edition was revised and expanded into a third renamed edition after his death by Gary Gordon and remains in wide use today.

In recognition of Nuckoll's contributions to lighting education, a group of colleagues established a memorial educational fund in 1988. The Nuckolls Fund for Lighting Education provides financial support to schools in North America to enable them to develop and expand courses and curricula in architectural lighting design.

The Fund's mission is consistent with Nuckoll's life's work: To provide students with an understanding

If it can be said that the lighting design profession started in New York City, then it is equally true that Jim Nuckolls started lighting design at Parsons.

At Parsons School of Design in New York, with which he was associated throughout the 1970s and '80s, he succeeded in making lighting a separate required course for all undergraduate environmental design students and introduced lighting design to the School's Continuing Education Program. As the profession grew in recognition and stature, he initiated a curriculum that allowed Parsons to offer the first Master of Fine Arts in Lighting Design. Both the continuing education program and the MFA continue to this day and have been joined by other degree programs across the country. In hindsight,

of lighting and the possibility of a career in the lighting community. Nuckolls inspired his students—and those who read his articles, his book or heard him speak—with a genuine enthusiasm for the role of lighting in the built environment. He lit that critical spark of interest so necessary to the pursuit of any career. The Nuckolls Fund serves as his legacy and continues that mission.

Above all, Nuckolls lives on in memory as a true lighting renaissance man—a renowned designer, writer, teacher and an IALD statesman—working to elevate the profession. ■

—Phil Tamulonis


**size
matters...**

performance, too

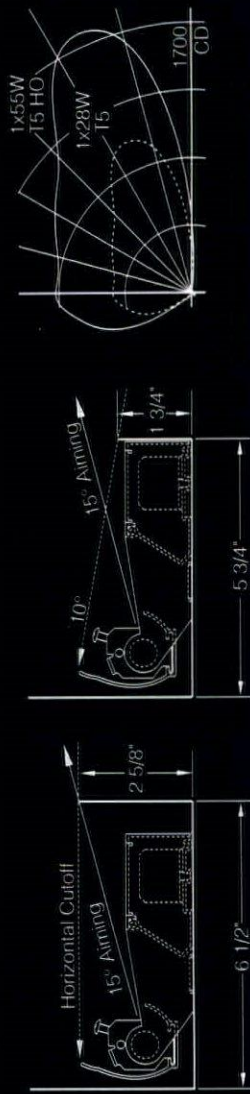
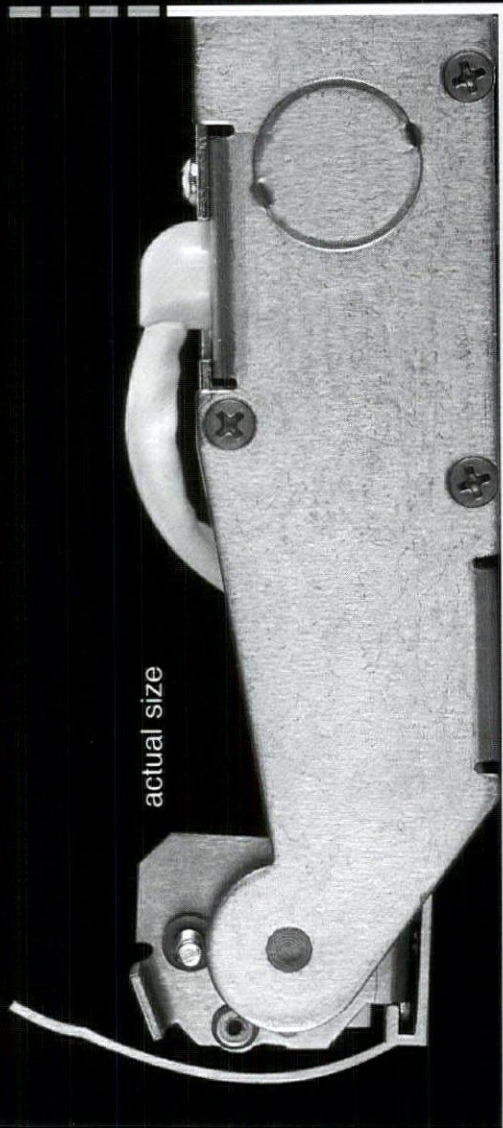
**your cove just
got smaller**

Style F305

- T5 fluorescent
- linked, adjustable
and lockable aiming*
- all aluminum and stainless
steel construction

 **elliptipar**
... there is no equal

114 Orange Avenue
West Haven, CT 06516
203.931.4455 Fax: 203.931.4464
www.elliptipar.com



*U.S. Patent No. 5,550,725 and foreign.

Circle No. 11 on reader service card or visit lightforum.com/marketplace

PROFESSIONAL LIABILITY AND THE LIGHTING DESIGNER

BY PAMELA BECK DANNER

Whether selling products or services, a professional business must anticipate potential problems with its customers and know how to respond promptly to such problems in order to avoid liability. In selling services, there are several things lighting designers can do to limit professional liability. First, designers should perform services pursuant to a well-drafted and carefully reviewed contract. Second, they should obtain professional liability insurance that limits their economic exposure in the event of a dispute. Lastly, and perhaps most importantly, designers should adhere strictly to their responsibilities under the contract for performance of the job and endeavor always to maintain an excellent relationship with the client. By carefully following each of these steps, lighting design professionals will not only excel at providing good customer service, but also be assured of a certain degree of protection in the event a dispute arises.

Since a handshake will no longer suffice for contracting with clients, it is imperative that services be performed pursuant to a carefully drafted contract. By providing a contract that outlines their services, policies and procedures, lighting design professionals will provide a more pleasant experience for the client, and most importantly, can limit their potential liability.

DRAFTING THE CONTRACT

The best way to ensure that lighting designers understand their responsibilities and potential legal exposure under the agreement with a client is by preparing and presenting their own contract to the client. A well-written contract should be drafted on behalf of the lighting design firm, ideally by an attorney familiar with contracts and the lighting design business and carefully reviewed by the firm or prepared by the firm itself for presentation to the customer.

There are four significant aspects to drafting the contract.

1. Lighting designers should prepare a clear and concise statement of the scope of services they offer. For example, it should set standards for the time of performance in advance. When a lighting designer, or any professional, sets standards for time of performance, both the customer as well as the professional can objectively determine whether everyone's expectations are being met. It is important in this respect that the lighting design professional put any oral representations

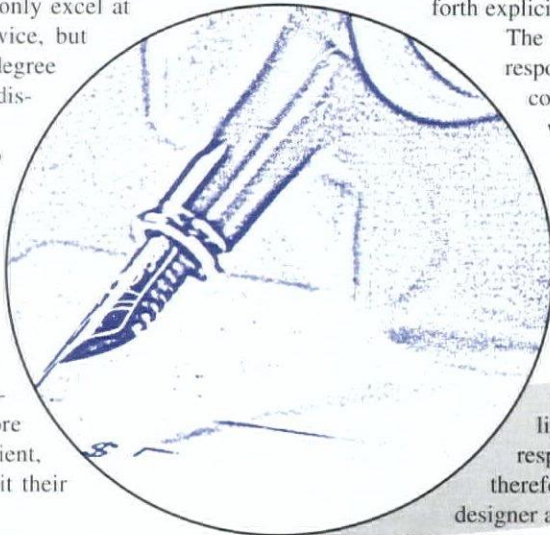
made to the client in the contract. Any fee negotiations and discussions of client confidentiality should be reduced to writing and clearly explained in the contract. The contract should also outline any alternative dispute resolution requirements.

2. The contract should specifically identify the obligations of both the lighting design firm and the client. Lighting designers should not certify, warrant or guarantee their work in a contract. A warranty or certification essentially guarantees perfection and lighting designers are not obligated to make such guarantees. Rather, lighting designers are contracting only to render their professional opinions and services. The extent of this contractual obligation should be set forth explicitly in the written agreement.

The advantage of setting forth the responsibilities of each party in the contract is that reducing to writing what the lighting designer is responsible for effectively limits his/her liability. For example, an architect who states that he is not responsible for work done by contractors is ensuring that if installation is not done properly, he is not liable.

Similarly, job-site safety is not the responsibility of the lighting designer; rather, it is the responsibility of the contractor. It is, therefore, imperative that the lighting designer avoid using words in the contract that could be construed as an assumption of responsibility for job-site safety in the contract. The lighting designer should review the provisions of the contracts that the contractors provide so as to determine how the contract apportions liability. It is also important to request proof of insurance from contractors and any other parties working on the project. While job-site safety is not the lighting designer's responsibility, it is still a good idea to have procedures in place for reporting any incidents involving safety.

3. The client's responsibilities should be set forth in the contract. Discussing the overall risk with the client helps to establish the client's responsibilities. All contracts should avoid language that is one-sided or attempts to shift undue risk to either party. However, it is a good idea to set a project schedule and require that the client give the designer timely responses. Client responsibility not only helps to open up the lines of communication, but it most significantly can limit liability when adequately included in a contract. Describe billing procedures in the contract



Since a handshake will no longer suffice, it is imperative that services be performed pursuant to a contract.

and make sure the client knows his responsibility for making payments on time. It is also a good idea to bill clients on a monthly basis and impose interest on any late payments, which should also be set forth in the contract.

4. The lighting design firm should set a deadline schedule for deliverables that can be met. Meeting these expectations is not only good customer service, but will also reduce client dissatisfaction. In effect, by providing a practical schedule instead of an unrealistic one, designers can prevent damage to their professional reputation and limit liability. Lighting designers may also want to consider keeping clients informed with periodic status reports, which can serve to prevent client dissatisfaction as well.

OBTAINING INSURANCE

After implementing a contract that limits liability, a business can provide for even more protection by obtaining adequate professional liability insurance. Professional liability insurance is important because it protects from financial disturbance, provides financial security and peace of mind and is often required by clients. Policy features may include individual/group coverage,

defense costs, lost earnings, damages, worldwide coverage, a broad range of coverage limits, no charge for evidence of insurance, deductible choices and reduced rates for credentialed members of the International Association of Lighting Designers (IALD).

Typically, professional liability insurance covers only those claims made against the designer and reported to the carrier during the policy period. Commercial general liability insurance policies cover claims based on occurrences that happen during the period the policy is in force regardless of when the claim or suit is brought.

Professional liability claims can have many negative effects, both financial and non-financial, including disruption of internal productivity, premium and deductible level increases, exclusion of coverage from certain claims and damage to professional reputation. Even if a claim has no merit, the investigation can be worrisome, damaging and expensive if attorneys become involved. If the dispute finds its way to a court of law, the court can determine the legal exposure of the lighting designer on a particular project simply based on standards of practice in the community and the designer's written or oral description of services.

(Continued on page 33)

PURE-WHITE

STONE-COLD

PRECISE CONTROL!

No UV, No IR... NoUVIR®

1 light bulb in 1 projector

32 fibers
4 watts per light

fiber optic lighting

5 to 50 feet long

for 32 lights

Shell lit with one eyeball, light aims 30°, zooms beam 15° to 50°, locks & relocks.

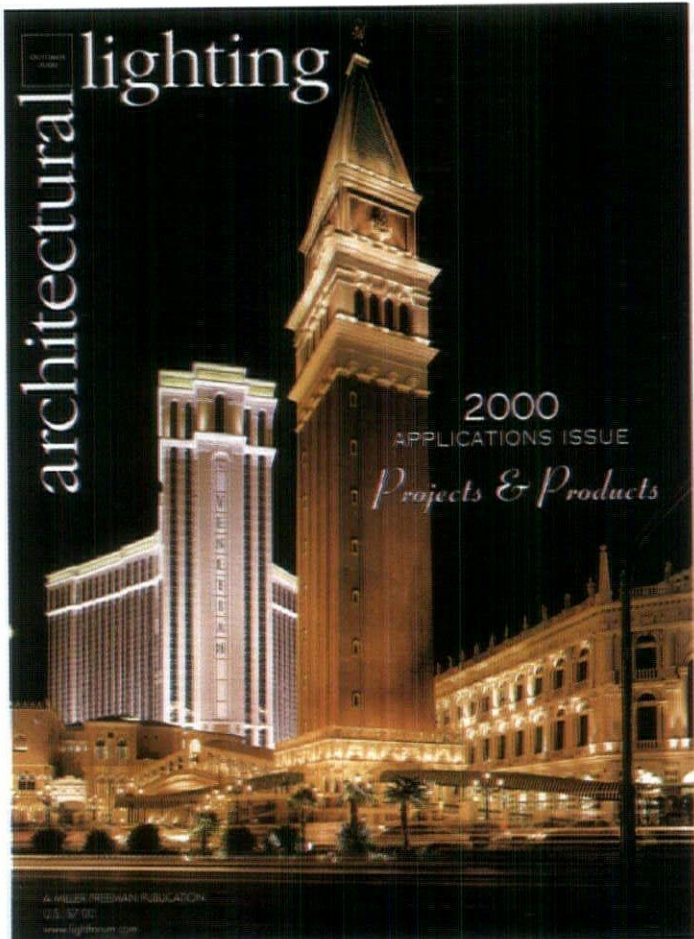
One 3mm fiber. ONLY 4 WATTS. No spill. 36 fc 8" dia. beam throw from 36" distance.

Call 302-628-9933 for 120-page catalog
VISIT OUR EDUCATIONAL WEB SITE AT WWW.NOUVIR.COM

NoUVIR Research 20915 Sussex Hwy 13 Seaford, DE 19973 phone 302-628-9933 fax 302-628-9932

Venetian Hotel Retrofits Outdoor Lighting with **NAiS** Metal Halide Electronic Ballasts

Las Vegas, NV. The Venetian Hotel recently replaced roughly 100 "magnetic" 70W/120V Metal Halide Ballasts with **NAiS DCP™ Electronic Ballasts**. The magnetic ballasts initially provided in fixtures purchased by the hotel had been failing, and lamp life was not as good as expected. "As a high end hotel, it's critical that we present a good image. Having lights out around the hotel was simply unacceptable; maintenance costs were also getting out of control," said Jason Fjare, Chief Engineer at the Venetian. "Aromat explained their quality record, which we confirmed by speaking with some of the OEM's who use their ballasts. They also explained how their ballasts regulated the output wattage to the lamp very precisely, thus providing consistent lamp to lamp color uniformity and light output; and that magnetic ballasts did not. They further demonstrated that their electronic ballasts provided more light output while actually using less energy! I only wish Aromat's technology was available at the time the hotel was originally designed. We plan to retrofit additional magnetic ballasts around the hotel, and we've specified **Aromat/NAiS DCP™ Ballasts** on any new fixtures we might purchase."



Pictured above: October 2000 cover, Architectural Lighting
Orrin Moore/RMA photography

SLIM LITE™

**METAL HALIDE
ELECTRONIC BALLASTS**

Same
great
ballast
in
a
new
slim
shape.

**ACTUAL
SIZE!**

Aromat
Subsidiary of **Matsushita Electric Works**

NAiS A Worldwide Brand

1-888-4AROMAT
www.aromat.com

NAiS DCP™
Metal Halide
Electronic
Ballasts

(Continued from page 31)

One of the most important steps lighting designers must take in the effort to limit their professional liability is to always adhere to their responsibilities for performance of the job. As noted above, it is essential that lighting designers stay on top of the project, making quality control an essential. Meeting customer expectations is the number one way to reduce client dissatisfaction. This includes meeting all deadlines and keeping clients informed with periodic status reports, particularly if there is an unanticipated delay that will prevent the designer from meeting an agreed upon deadline.

MAINTAINING RELATIONSHIPS

The most common cause of lawsuits is deterioration in the relationship between the client and the professional. It is essential, therefore, that designers put forth their best efforts to maintain an excellent relationship with the client. This effort begins with designers explaining their policies to the client. Lighting professionals cannot rely on the assumption that the client will carefully examine the contract. Instead, they should carefully explain the policies regarding their services and may want to consider asking for client feedback to ensure the client's needs are being met. Subsequently, if any problems arise, designers should respond to them promptly. A client whose problem has been solved promptly is less likely to file a complaint and more likely to recommend a lighting designer for his/her good customer service policy.

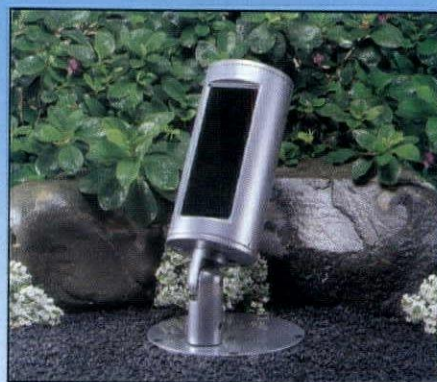
If, despite every effort, a dispute starts to get out of hand, designers should consider bringing a third party into the picture. Every lighting design firm should have an attorney who is familiar with its lighting design practice so that it can call for advice in such a situation. Designers may also want to use the services of an organization that assists in mediating consumer disputes. For example, the Better Business Bureau is one of the first agencies to which a consumer turns when having problems with a business and is adequately experienced in helping to solve disputes. Many local governments offer mediation services in order to resolve disputes between customers and businesses before they go to court. Similarly, many communities have dispute resolution programs that may be helpful for small business disputes.

If a lighting design firm is careful to follow each of the above steps, it will not only be successful in limiting its professional liability, but it will likely substantially improve customer satisfaction and consequently increase its clientele. ■

Pamela Beck Danner is IALD's General Counsel and maintains a private practice specializing in association law. She can be contacted at: Law Offices of Pamela Beck Danner, 1364 Beverly Road, Suite 101, McLean, VA 22101; phone (703) 734-2793, fax (703) 903-8949, email: pbdanner@mclean.va.us.




Yosemite Series™



Sequoia Series™

B-K Lighting is proud to introduce the Yosemite Series™ and Sequoia Series™ of fixtures. These contemporary designs incorporate B-K Lighting's patented ACV™ Valve System and 360HD™ Mounting System. Designed for use with the T6 Ceramic Metal Halide lamp, B-K Lighting's unique 'interchangeable optics modules' create a fixture that provides the lighting designer a variety of functions in a single architecturally-styled housing.

 **B-K LIGHTING...** the number one choice in specification-grade, outdoor architectural lighting.

40429 Brickyard Drive • Madera, CA 93638 • (559) 438-5800 Fax (559) 438-5900
email: info@bklighting.com • web: www.bklighting.com

PROFESSIONAL SERVICE AGREEMENTS

BY ALFRED R. BORDEN IV, IALD

The most fundamental consideration as a professional in a lighting design business is the state of relations with your clients. The reason is simple: *Without clients, you would not have a business.* When client relations are healthy, you and your client have a common goal for the project and a shared understanding of how to get there. Your client sees your services as helpful and valuable; you see their needs clearly and are able to focus your efforts appropriately. A good client relationship is based on trust and mutual respect. An ailing relationship is characterized by suspicion and disappointment. A lot of effort can go into nurturing good client relations throughout a project—careful listening, attention to detail, long lunches, summer golf games—but they must rest on a bedrock of comprehension of each participant's responsibilities to the project team. When each of you is certain about what the other will provide and will *not* provide to complete the project, there is much less chance of developing the tensions that can come from confusion in expectations.

An old adage says, "Good business makes good friends." The wisdom in this is clear. You want to be friends with your clients. They will take care of you now and in the future and your working days will be much more enjoyable. One of the best routes to friendly clients is orderly, dependable business practices. Be absolutely clear in presenting your goals and needs and once stated, be consistent in your dealings.

BE A PROFESSIONAL

A very important consideration when developing business relationships is your status as a member of the lighting design profession. Most people consider a member of a profession to be a person who has mastered a body of specialized knowledge that was acquired through rigorous training and education. A good example is a medical doctor. Typically, people expect this person to practice their profession with a high degree of integrity and with a special concern for the public welfare. When you present yourself as a professional, your clients will demand a lot of you.

Unfortunately, the professional product that you provide—your lighting design services—may not be as neatly quantified in your client's mind as the hard goods produced by a fixture manufacturer. A lighting fixture can be defined by its specific appearance, size, electrical load and photometric characteristics. These parameters are clear. If the fixture arrives undamaged and does not meet all of the stated specifications, the manufacturer is assumed to be at fault. At this basic level, the difference between this product's performance and non-performance is obvious. Unless you provide specific definitions for your services, your client may be unclear about the difference between your performance and non-performance on the project.

This may not seem like an urgent need if you are already in practice. You may base some of your dealings on

a handshake or on standing relationships where the client's knowledge is assumed.

But return to the example of the medical doctor. We all think we know the services that a doctor provides and the responsibilities they undertake, but consider how often this becomes a question for the courts. How many potential clients actually understand and accept the terms and limitations of a lighting designer's responsibilities? How much do you want to gamble on the answer?

In fact, the courts already provide a very general guideline. Each member of a profession must practice according to a Standard of Care. This means that every professional must apply the degree of skill and attention to detail that would be used by other reasonably competent practitioners of the same discipline under similar circumstances. We are all judged against each other. It is in all of our best interests to develop standard business practices that clearly define our role on the project team.

CRAFT A STANDARD AGREEMENT

A business relationship begins with an agreement. You agree to perform a task and your client agrees to pay you. The law recognizes two basic types of agreements: Implied and Expressed. In a way, an Implied Agreement can materialize without the informed consent of either you or your client. It may start with a simple handshake arrangement in which you agree to redesign the lighting for one corporate conference room. It is a small project, so you simply do the work and send them a bill. Your actions can be construed to mean that you accept the terms of whatever standard agreement form they use. Your agreement is implied. Your client may not be aware that you are operating without full knowledge of their agreement form, but they will be required by their management to enforce its terms. Their agreement could include a provision for partial payment of fees if the project is stopped or could make you financially responsible for delays caused by late equipment deliveries. You put yourself at unreasonable risk when you operate under an Implied Agreement. An Expressed Agreement describes terms for your service. It can be quite simple or very detailed. It can be written or oral, but the terms of an oral agreement can quickly fade into an argument fueled by poor memories. Oral agreements should definitely be avoided.

Your goal should be to fashion a written agreement that represents a fair balance between risk and reward for you and your client. A good agreement represents a mutual understanding between both of you regarding what each of you will do and not do during the project. It defines the expectations and responsibilities of each party in clear and unambiguous language. A good written agreement can also



Agreement Issue	IALD Agreement Reference
Scope of Services <i>Provide sufficient detail and exclude services not intended</i>	Article II
Timeliness of Performance <i>Allow reasonable time to perform</i>	Paragraphs 3.4 and 4.1
Billings and Payment <i>Provide specific payment terms</i> <i>Provide for collection costs</i> <i>Provide for suspension and termination</i>	Paragraph 5.5 Article VIII
Code Compliance <i>Delete certifications of compliance</i>	Paragraphs 3.6 and 4.8
Construction Phase Services <i>Include observation in scope</i> <i>Review submittals for general compliance only</i>	Paragraphs 2.5 and 2.6.2
Ownership of Documents <i>Retain ownership, limit/prohibit reuse</i>	Article VI
Insurance Requirements <i>Consistent with current coverage</i>	Article VII
Indemnities <i>Limit to your negligence only</i>	Paragraphs 3.5 and 4.7
Dispute Resolution <i>Identify applicable business laws</i> <i>Identify a method for resolution</i>	Paragraphs 9.1 and 9.4

help to turn away potential clients that may come to you with unreasonable demands or unrealistic expectations. It is also your first defense against a professional liability claim.

An effective written agreement should contain at least the following parts:

Scope of Work. Your scope defines the areas of the project for which you will have design responsibility. These areas must be described in terms, such as room names or types, that are immediately recognizable to your client. A statement such as "We will design the lighting for your new offices" is vague. Your client may think that you are doing the whole building while you think that you are only doing the open office and executive suite.

Scope of Services. This is the place where you must provide a complete, precise list of services that you will and will not perform as part of your responsibility to the project. This is your opportunity to present your work process in terms such as the number of meetings you will attend; the method of documentation you will use; your involvement with design revisions; the number of site visits you will make; etc. The list should be divided into project phases and show all the steps you will take to bring the project from concept to punchlist.

Throughout the scope of services, you must also state what you will *not* do, such as design the electrical circuiting for the lighting or review contractor submittals for equipment substitutions. You must not leave gaps where your client can insert the wrong assumption.

You should also provide a list of Additional Services. These are services that you have not included in your fee, but you can provide for additional fee. The list should be as complete as possible, but

should definitely include items that appear on so many projects, such as attendance at additional meetings, or the review of substitutions.

Project Schedule. This is where you list all the dates of when you estimate that your work can be issued to the other members of the design team. The project schedule is often the part of the agreement that requires the most negotiation. In recent years, it seems that clients want everything finished before you can barely get started. The tone of these discussions will often let you know if this client will be a reasonable partner in the design process or if you should walk away. The schedule that you establish should be timely and responsive to your client's needs but not unreasonable or restrictive for you.

Terms and Conditions. This section defines the ground rules for your business relationship. It should list your responsibilities, such as team coordination, conformance to the schedule, etc. It should list your client's responsibilities, such as designation of an individual as their decision-maker, distribution of current information, etc. The section should specify critical issues such as the limitations on the use of your lighting documents, the limits of your professional liability and the method for suspending and restarting the project, etc.

Compensation. The mode of compensation on each project must be appropriate for the scope, the schedule and the terms of your service. It must represent a reasonable return on the risk you are taking and a reasonable value for your client. This section must include the fee and any reimbursable expenses, how it will be billed, when it must be paid and the steps you will take if it is not paid. It can also be important to define the type of currency—U.S. dollars drawn against a bank located within the U.S.

PUT IT IN WRITING

Written agreements typically come in a few forms, which are listed below. It is extremely important that you work with your attorney to review such documents and assemble a standard form that works best for your business.

Letter of Agreement. This is an agreement that is formatted as a letter to your prospective client. It includes a line on the bottom for their signature and is often submitted as a fee proposal. This can be a useful format, but it must be complete in its presentation. Often a Letter of Agreement will be clear about the scope, services and fee, but will omit the business terms and conditions.

Purchase Order. This is a short form document that businesses use to order materials. Sometimes, it will be offered to a designer as the basis for their professional service agreement. *Be wary of Purchase Orders.* The fine print on the backside of the form makes the signer responsible for delivery schedules, replacement of damaged materials and the assumption of product liability. This has nothing to do with the responsibilities of a lighting designer. One way to deal with a

Purchase Order is to cross out such statements and have your client initial their agreement to the changes.

Client-Generated Agreements. An agreement form generated by the client may be one-sided and include onerous language or assign responsibilities that are beyond the control of the lighting designer. Sometimes the designer is required to hold the client harmless against the errors and omissions of contractors and equipment suppliers. You must read every line of such agreements and look for the traps. You probably want to discuss any problem clauses with your attorney and negotiate the changes with your client before signing.

Professional Association Standard Agreements. These forms are consensus documents assembled by professional peer groups and subjected to intense legal review and often, court tests. They can provide the best starting point for crafting the agreement that you will use.

The International Association of Lighting Designers (IALD) can provide Standard and Abbreviated forms for an Agreement between an Owner and a Lighting Designer and between a Prime Design Professional and a Lighting Designer. Review a brief checklist of items you may want to include in your agreement and the corresponding articles in the IALD forms (see page 35).

USE DEFINITIVE TERMS

A corollary consideration when drafting a standard form of agreement is learning to avoid the use of ambiguous language in all of your

business communications. You should not use extreme words such as "final," "all," "complete" or "best." This can imply a warranty such as your "final" drawings will never require any revision or correction. You must also avoid words with multiple meanings such as "inspect" or "supervise" and words of promise such as "guarantee" or "certify." You must never appear to promise more than you intend—or are able—to deliver.

For example, you write a letter to your client and say that you will visit the project site to "inspect" the lighting installation. You mean that you are going to visit the site and perform a visual review of the work to determine if it conforms to the intent of your design documentation. Given the ambiguous meaning of the word, "inspect," your client could reasonably infer that you will perform an exhaustive examination of the work including the means and methods of construction. Based on this interpretation, you could be drawn into a dispute between your client and the electrical contractor over the failure of a particular installation method. Job-site conditions are way beyond your ability to control. Do not let your own words trap you. Your letter should read that you *will* visit the site to "observe the progress" of the lighting system installation. This phrasing is much clearer about your intentions. ■

Alfred R. Borden IV, IALD is president and owner of The Lighting Practice in Philadelphia, PA.

(COMPANY NAME)

ABBREVIATED FORM OF AGREEMENT BETWEEN OWNER AND DESIGNER

AGREEMENT

made as of _____ day of _____ in the year of Two Thousand and _____

BETWEEN the Owner (hereinafter referred to as Client):

(Client's Name and Address)

and the Designer:

(Designer's Name and Address)

For the following Project:

(Project Name and Location)

ARTICLE I SCOPE OF WORK

The Agreement is based upon our [_____ (telephone discussion) (meeting) plan review] on _____ date . The Scope of Work is based on the project areas as described below.

A. Scope of Work

The following areas shall be a part of this work:

(See attached Scope in Appendix I if more space is needed.)

THE CLIENT AND DESIGNER AGREE AS SET FORTH BELOW

ARTICLE II SCOPE OF SERVICES

2.0 The Designer shall provide the following professional services.

(Insert descriptions of services)

ARTICLE III DESIGNER'S RESPONSIBILITY

3.1 The Designer shall collaborate with the Client and Client's Consultants for the part of the _____ Project as described above in Article I. Except as set forth herein, the Designer shall not have any duties or responsibilities for any other part of the Project.

3.2 The Designer shall design a lighting system, recommend appropriate equipment and advise on conditions which may affect the Project. In accordance with the services listed in Article II.

3.3 The Designer shall not be responsible for the acts, errors or omissions of the Client, or the Client's other Consultants. The Designer shall not be responsible for the means, methods, techniques, sequences or procedures on construction, fabrication, procurement, shipping, delivery or installation, for the acts and omissions of the Contractor, any Subcontractors or any of their agents or employees, or any other persons performing any of the work.

3.4 The Designer shall not be responsible for services normally within the scope of the architectural or electrical engineering disciplines, including but not limited to structural supports, ventilation, wiring, circuiting, code compliance, emergency lighting, security lighting and exit lighting.

ARTICLE IV CLIENT'S RESPONSIBILITY

4.1 The Client shall establish a Project Schedule for presentation to and acceptance by the Designer.

4.2 The Client shall promptly furnish accurate and complete information to include drawings, specifications, surveys and reports pertaining to the requirements of the Project at no expense to the Designer. The Designer shall be entitled to rely on the accuracy and completeness thereof.

4.3 It is the responsibility of the Client and Client's consultants to accurately transpose onto final drawings all documentation and fixture types as des-

igned by the Designer. Failure to do so will result in the Client being charged separately for any additional time required to review documents.

ARTICLE V COMPENSATION

5.1 Basis of Compensation

5.1.1 Hourly

Hourly rates shall be as follows, subject to salary increases during the life of the project:

OR

5.1.1 Estimated Maximum Fee

The base contract price for work to be performed by the Designer shall be _____. This price does not include any reimbursable expenses, or additional services.

5.2 Compensation for Additional Services

5.2.1 Additional services will be billed on an hourly basis based on the hourly rates currently in effect as set below. Rates may be subject to change during the life of the project. The Designer will notify the Client of the need for additional services prior to commencing work.

5.3 Reimbursable Compensation

5.3.1 In addition to the fees payable hereunder, the Client shall reimburse the Designer all out of pocket expenses incurred in the performance of its services on the project such as (but not limited to): out-of-town travel and lodging, long distance telephone calls, printing, reproduction, mock-up supplies, express mail and courier services.

5.3.2 Reimbursables shall be billed at cost times a multiplier of _____.

5.4 Fee Payment Schedule

5.4.1 Upon acceptance of this Agreement by the Client, the Client shall pay the Designer _____ as a retainer to be credited to the last invoice(s).

5.4.2 Invoices will be sent monthly for work performed during the previous period. These invoices will also include reimbursable expenses incurred to date.

5.5 Fee Payment Provisions

5.5.1 The Designer shall submit invoices for services and reimbursables in accordance with the Agreement. The Client shall review such invoices and, if they are considered incorrect or untimely, the Client shall review the matter with the Designer and confirm in writing to the Designer within ten days from receipt of the Designer's billing the Client's understanding of the disposition of the issue.

5.5.2 All fees invoiced will be net payments, payable in United States dollars, and drawn on a United States bank or branch therein. Any customs duties, excise taxes, or similar fees will be paid by the Client.

5.5.3 Payment is due within 30 days of receipt of invoice. These invoices are not related to the invoicing of these services from a third party. The Designer will be entitled to discontinue work without penalty upon 7 days written notice if payment for outstanding invoices has not been received within 30 days of invoice date. Payments due and unpaid under the Agreement shall bear interest from the date payment is due at the rate of 1-1/2% per month, or the highest legal rate, whichever is less.

5.5.4 The Designer shall be entitled to recover reasonable attorney fees and costs incurred in the collection of any amounts past due.

5.5.5 If the project is suspended for more than three months or abandoned in whole or in part, the Designer shall be paid compensation for services performed prior to the receipt of written notice from the Client of such suspension or abandonment, together with Reimbursable Expenses then due. The amount due to the Designer as compensation for his basic services shall be computed as set forth under Termination of Agreement. If the project is resumed after being suspended for more than three months, the Designer's compensation shall be subject to renegotiation.

ARTICLE VI OWNERSHIP AND USE OF DOCUMENTS

6.1 This agreement does not create a work made for hire relationship between the Client and Designer. Ownership and copyright for all documents and designs created by the Designer hereunder shall remain the exclusive property of the Designer. Drawings and Specifications prepared by the

Designer as instruments of service are and shall remain property of the Designer whether the Project for which they are made is executed or not. They are not to be used by the Client on other Projects or on extensions to this Project or for completion of this Project by others except by agreement in writing with the Designer and with appropriate compensation to the Designer.

ARTICLE VII INSURANCE

7.1 The Designer shall provide insurance to protect himself from claims under workmen's compensation acts; from claims for damages because of bodily injury, including personal injury, sickness, disease or death of any employees or of any other person; from claims from injury to or destruction of property including loss of use resulting therefrom; and from damage to or destruction of property including valuable papers and records coverage and including loss resulting therefrom.

ARTICLE VIII TERMINATION, SUSPENSION OR ABANDONMENT

8.1 This Agreement may be terminated by either party upon not less than seven days' written notice.

8.2 In the event of Termination, Suspension or Abandonment of the Project, not the fault of the Designer, the Designer shall be compensated in full for each completed part of the Designer's Basic Services and any Additional Services performed and Reimbursable Expenses incurred during that part of the Designer's work; plus such fees and expenses for work in progress since the last completed part.

8.3 Failure of the Client to make payments to the Designer in accordance with this Agreement shall be considered substantial nonperformance and cause for termination.

ARTICLE IX MISCELLANEOUS PROVISIONS

9.1 Unless otherwise provided, this Agreement shall be governed by the law of the State of _____, which is the Designer's principal place of business.

9.2 The Designer shall have the right to include representations of the design of the Project, including photographs of the interior and exterior, among the Designer's promotional and professional materials. The Designer shall not include the Client's confidential or proprietary information if the Client has previously advised the Designer in writing of the specific information considered by the Client to be proprietary or confidential. The Client shall provide professional credit for the Designer, to be named as _____ on all published materials which reference the Designer's Part of the Project, or graphically depict it.

ARTICLE X OTHER CONDITIONS OR SERVICES

(Insert descriptions of other services, Additional Services or modifications to the conditions or terms of this Agreement which pertain to this specific Project)

This Agreement entered into as of the day and the year first written above.

CLIENT

DESIGNER

(Signature)

(Signature)

(printed name and title)

(printed name and title)

OWNERSHIP: THE FUTURE OF YOUR FIRM

BY ROBERT PROUSE, IALD

Whether establishing a new firm or contemplating buying or selling a firm—or going through some kind of ownership transition—you must first consider the various types of business entities a lighting design consulting firm can be. In the first instance, simply making yourself aware of the options will help in choosing the one that is best suited to you and your business practices. In the latter case, it's important to determine if the current form of ownership is viable for your situation or if it's time to change. As with so many issues regarding this subject, consulting an attorney is essential; the laws governing all businesses vary from one state to the next.

A Sole Proprietorship. As the name suggests, this is a business with one owner. The advantages are that it has no organizing cost and does not require separate business tax returns. The disadvantages are that there is no limit on the personal liability of that owner and no ability to obtain additional capital by sharing ownership.

The General Partnership. This is an association of two or more individuals who conduct a business for profit. Its advantages are that all partners have a vested interest in the success of the enterprise, they all have a say in the management and they all share in the profits or losses. It is also easy to dissolve, if necessary. However, all partners are agents and therefore, there is no general liability. This form of business is popular among attorneys and other individuals who are more comfortable with litigation than most lighting designers. It may not be suitable for lighting designers who are primarily concerned with other issues as a matter of course.

The Limited Partnership. This form of business is characterized by one partner having unlimited liability and managing the firm while other partners only contribute capital and have limited liability. The "limited partners" are only liable to the extent of their contribution. This is not a particularly common form of ownership among lighting design consultants.

The Corporation. A common form of doing business, a corporation is a separate legal entity that has most of the same powers possessed by an individual. The advantage is that the "corporate veil" provides limited liability for the individuals who are the shareholders of the corporation. There are two types of corporations, the Type "S" and the Type "C." If you are a "C," the profits of the corporation are taxed—and then the shareholders are taxed on their share of the profits. In a Type "S," all of the on-paper profits accrue to the shareholders and those profits are taxed once at the individual rate. Although the Type "S" is theoretically more profitable to the shareholders because there is no double taxation, in reality, the differential between the "profits" determined by generally accepted accounting practices and

the actual cash on-hand at the end of the tax year may result in the shareholders paying taxes on money they did not actually receive.

The Limited Liability Company. This has limited liability for members but avoids the double taxation mentioned in conjunction with the Corporation. This form of business is also very flexible in terms of management and financial structure. The disadvantages are that it is expensive to set up and since it is a relatively new type of ownership, no one fully appreciates all the implications for lighting design consulting.

THE BUY-SELL AGREEMENT

Typically, the sale of a firm or a change in ownership—such as a succession in management—is governed by a Buy-Sell Agreement. This is a binding contract that controls who can buy an owner's share of the business during a change of circumstances—most commonly death, retire-

Is the current ownership form viable for your situation—or is it time to change?

ment or simply leaving the business for any reason. It also establishes the price—or a method of determining the price—that will be paid for the owner's shares.

There are many considerations in constructing a solid Buy-Sell Agreement. The services of an attorney are essential at some point. It may also be worthwhile to consult people who have been through similar situations. Colleagues are one good place to start, as well as friends or relatives in a service business who may have experience with this. Since many significant differences exist between a service business and a company that manufactures and/or sells product, the lessons learned from one are not terribly relevant to the other.

A solid Buy-Sell Agreement gives the present and future owners some degree of control over the whole transaction and reduces risk for all involved. It should protect an owner who wants to leave the firm and a deceased owner's heirs from financial difficulties. It typically spells out the method of buying and selling ownership in all foreseeable circumstances and eliminates the possibility that current owners will be forced to share profits with inactive or unsuitable owners.

One of the most critical parts of a Buy-Sell Agreement is the establishment of a price for the firm. There are many methods of doing this. One is simple book value, which is the straightforward differential between the assets and the liabilities of the firm on a given date. Another is a multiple

In my experience...

I suppose the first thing that must be said about any transition or sales plan in a field that is composed entirely of very small firms—like lighting design consulting—is that no two deals will be alike, and the process will always be intensely personal and even idiosyncratic in both timing and details. In the case of IALD firms, there is a generation of firms with founders now at retirement age. These people not only founded their firms, they founded the IALD. There is another generation (mine, good grief!) right behind them who are now in their late 40s and 50s who are—or should be—thinking about retirement plans.

It may seem that I'm stating the obvious, but it is of paramount importance for all parties to figure out their own needs: Their "wishes, hopes and dreams." In my own experience, and in that of others to whom I've spoken about this subject, this may not be as easy or speedy as one might expect. You should be prepared for some lengthy discussions over a period of time. Everything won't be wrapped up over lunch. But you do need to have these discussions without the intrusion of the quotidian: If you must be in the office, close the door and turn off the phones; plan a series of lunches out of the office; or even plan a few retreats to a resort or hotel.

What is most important is that there must be time in between each discussion for mutual reflection and for each party to discuss the issues raised with their spouse/significant other and perhaps their accountant or attorney, or even Uncle Max.

Which brings me to a crucial point: You need help in this endeavor. You wouldn't perform open-heart surgery alone and this is open-heart surgery on your company. At first, you might think that you don't know *anyone* who can help you, but using the "Six Degrees of Separation" principle, you probably can find several people who will be able to provide you with a valuable discussion on your particular situation. I wouldn't necessarily hurry to find a lawyer right away, unless you know one as a personal friend. I think

it is useful to ponder your options without the encumbrance of legalities for awhile. It's not unlike the earliest stages of a lighting design: Let your mind wander. Don't plunge right into illuminance calculations. What do you want to see?

There will come a time when legal advice is necessary. Very often the seller will have an attorney from the earliest stages. In fact, it might be the company's attorney. The potential buyers, if they are employees of the company, will need their own attorney, if only for peace of mind.

Some other provisions that you might want to consider are:

- "Right-to-force-a-sale" provision (usually in case of death or inactivity for any reason)
- Purchase life insurance on owners to fund purchase from the estate in case of death
- A noncompete Agreement

In our own case, we structured three different Agreements among the shareholders. One was a "Redemption Agreement" that spelled out the valuation of the company and the terms upon which it would be purchased, including the timing and various legalities about the state of the firm and the continuation of that current condition by all parties.

Next, we signed an "Employment Agreement" with the founder and seller that clearly spelled out his duties, compensation and benefits.

Finally, we signed a new "Shareholders' Agreement" that superseded all previous such agreements and stipulated the makeup of the Board of Directors (we are a subchapter "C" corporation in New York State). It spells out in detail how shares may be transferred, as well as when they must be transferred, and provides that either the corporation or the individual shareholders will cause any seller's shares to be purchased. It also spells out the procedures to be followed in the eventuality of the disability of a shareholder.

of the book value that attempts to take into account intangible assets such as goodwill or reputation in the marketplace or future business opportunities. Other methods include capitalization of earnings and appraisal by an outside party.

This portion of the process may not be as difficult as you might imagine—or it may be the downfall of the entire deal. It should probably not be the first thing you try to resolve. To deal with this matter, *Design Office Management Handbook* offers the following advice:

"The selling price will most likely be a compromise between the owner's assessment of fair market value and the buyer's ability and willingness to pay... When buyers believe the price is too high, many vote with their feet and look elsewhere for personal fulfillment. Sellers, particularly founders, tend to place a higher value on the firm... key advice to sellers is not to drive too hard a bargain on the selling price. The firm's highest value is as a going concern. If the sellers drive away buyers by overpricing, the going concern value can erode to a liquidation value."

And:

"Buyers and sellers must realize that the only source of financing for internal transition is the firm itself."

As a buyer or a seller, think about what's important to the seller. It may not be entirely about the immediate cash transaction. There are other quality-of-life considerations such as number and types of projects worked on; degree of involvement in projects; maintenance of salary and perks; professional fulfillment through institutionalization of the firm; and even simply not wasting the emotional and financial investment that was made in the firm over a lifetime. Each of these issues can impact the valuation.

Buyers need to think about how they intend to become sellers. Sellers need to appreciate that buyers will become sellers in perhaps fewer years than what was required to build up the firm.

All parties should consider the alternatives to a buyout—even if all agree that a buyout is the preferred solution. Alternatives worth discussing may include: dissolving the firm and cashing everyone out; selling to a third party; developing a strategic alliance with another firm or another type of firm. Do not discount any of these possibilities for purely emotional reasons.

And finally, when it comes to the issue of valuation, all parties must have full access to all financial data on the firm, both current and historical. ■

Robert Prouse, IALD is a partner at the lighting design firm of Brandston Partnership, Inc. in New York City.

OUTDOOR & LANDSCAPE

The WFB Bollard from **Quality Lighting** features a columnar body with a sealed domed head and a thermal- and shock-resistant glass lens that is fully gasketed with a weatherproof seal. Three 3/4-in.-thick steel rods extending the length of the body secure the top third of the head to the base. The tubular body consists of a .135-thick steel wall, hot-dipped and galvanized inside and out. External hardware is tamper-proof stainless steel and requires a special tool for disassembly. Illumination is provided by a 35W or 100W metal halide lamp. C/UL-listed for wet locations. **Circle No. 40**



From Cooper Lighting's **McGraw-Edison**, the modular PSL (Parking Structure Luminaire) meets IES standard RP20, which includes vertical footcandles as essential for parking garage environments. The minimal prism depth of PSL's refractor component reduces dirt accumulation and maximizes light transmission to minimize the visual cave appearance prevalent in many parking facilities. Internal glare guards redirect a 60-degree, horizontal segment of

light, previously emitted toward the driver, into walkways and parking stalls. A light trespass shield cuts off illumination toward the exterior. Lamping options are 100-175W metal halide or 100-150W HPS sources. **Circle No. 41**

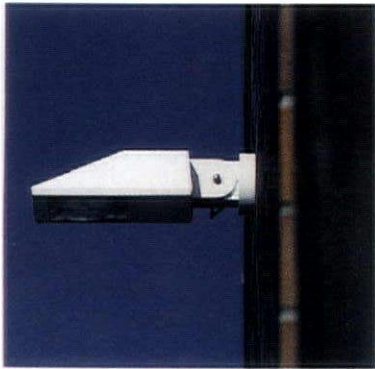
Ten exterior chrome bulkhead fixtures have been added to **FC Lighting's** Architectural Lighting series, which offers various shapes, including square, round,

eyelid and oval as well as more distinctive shapes such as the haloed Model 8082. The chrome finish on FCWS fixtures carries a five-year warranty against flaking, clouding and other blemishes. Each bulkhead fixture measures approximately 10 in. wide and 4 in. in diameter and accepts compact fluorescent PL sources ranging from 13W to 26W. **Circle No. 42**



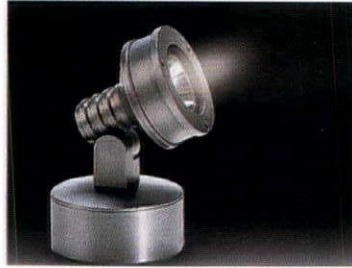
Aviano from **Hessamerica** provides indirect lighting in outdoor applications. Resembling a bird in flight, the fixture features a gull-wing reflector perched atop a trapezoid-shaped head and is mounted on a 13-ft. hot-dipped, galvanized steel pole. The reflector angle is adjustable two to four degrees to fine-tune light distribution. Housing is corrosion-resistant, "finned" cast aluminum, and the reflector is formed aluminum, supported by an adjustable steel support rib. Standard finish is matte silver/gray metallic paint; special colors may be specified. **Circle No. 43**





Bega has introduced a new series of pole- and wall-mounted floodlights for 70W and 150W ceramic metal halide lamps. The fixtures can be used to illuminate roadways and parking areas as well as horizontal and vertical surfaces with its asymmetrical forward throw distribution. A swivel arm allows for horizontal and vertical aiming positions. UL-listed for wet locations and any orientation. **Circle No. 44**

ExcelLine's GeoScape series features a heavy-duty, die-cast aluminum housing and door frame finished with a corrosion-resistant polyester powder coat. Offered in three different designs and a choice of four different distributions, the fixtures are equipped with segmented or semi-specular formed reflectors and Tru-form molded prismatic or flat, clear tempered glass. GeoScape is designed for either direct or indirect orientation and can accept up to 400W metal halide or HPS sources or up to three 42W PLT lamps. C/UL-listed. **Circle No. 45**

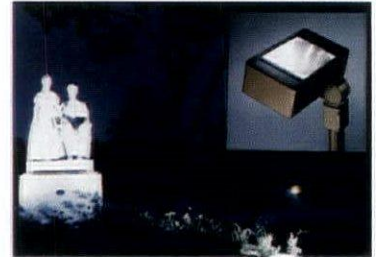


Ciello from **Architectural Landscape Lighting** provides low-voltage accent lighting and can be pole- or surface-mounted. The cylindrical, die-cast aluminum housing features a narrow base and a broad lamp head. Fixtures are anchored to a solid, U-shaped yoke to allow precise aiming through a range of angles. Mounting options include below-ground spike-mount, straight pole, curved arm and surface mount. Ciello uses MR16 lamps and is finished with a chip- and fade-resistant enamel. Custom colors are available. C/UL-listed for wet locations. **Circle No. 46**



The third generation of **Architectural Area Lighting's** Universe Collection features fixtures scaled in three sizes to provide integrated site design for parking lots, pedestrian areas or the walls of buildings. A modular fixture system allows for different configurations of luminous elements, shade shapes and optical systems, which can then be mounted to a variety of poles and arms. A choice of four luminous elements is offered. For medium- and large-scale fixtures, four horizontal reflector systems and an induction lamp option are available. **Circle No. 48**

The Rectangular Series from **Ruud Lighting** is offered with a choice of six optical systems, including flood and area distribution types. Fixtures come equipped with Uni-Form pulse-start metal halide, probe-start metal halide or HPS lamps and measure 5^{1/10} in. high, 9^{1/4} in. wide and 16 in. long. Construction is die-cast aluminum with a DeltaGuard finish, which carries a seven-year warranty against corrosion, UV degradation and abrasion. Standard fixtures are bronze. Other finish colors are available. UL-listed for wet locations. **Circle No. 47**



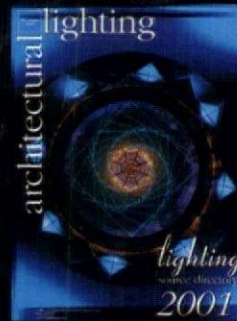
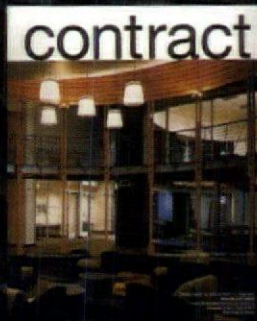
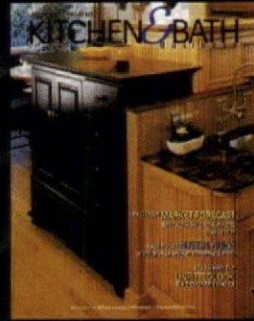
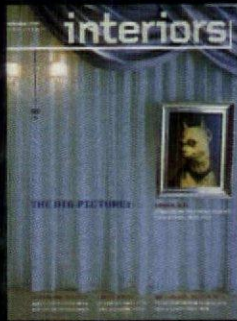
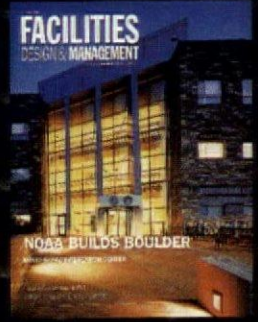
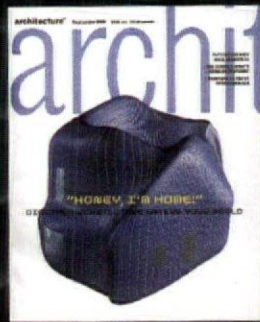
Holophane's Mirrostar fixtures feature an 18-gauge aluminum box construction, reinforced backplate and Miro4 optics, which meet the IES "Full Cutoff" classification and help limit light pollution. The fixture door consists of a single-piece, 13-gauge aluminum wrapped around an extruded frame. A "piano hinge" running the width of the housing attaches the door to the housing. To service electrical components, the fixtures includes a removable ballast tray with tool-less disconnect to facilitate quick change out. **Circle No. 49**

a solid structu

**BILL COMMUNICATIONS, INC. IS
BREAKING NEW GROUND, BRINGING
TOGETHER THE MOST POWERFUL
NETWORK OF REAL ESTATE AND
DESIGN MAGAZINES**

Real Estate and Design Group
a combined circulation of over 360,420

re



MICHAEL F. CHARLTON, PRESIDENT
REAL ESTATE AND DESIGN GROUP
BILL COMMUNICATIONS, INC.
EMAIL: mcharlton@billcom.com
TELEPHONE: 646.654.7205

Aromat Corp.

Introducing Aromat's SLIM LITE NAiS DCP Electronic Metal Halide Ballasts for 20W, 39W, 70W 120V applications. Aromat now offers the NAiS DCP technology in a smaller, slim style that is ideal for new track fixture designs. Slim Lite provides the same high-quality performance features as our standard-size ballast including excellent line regulation, superior color rendition, energy savings, increased photometric lamp life, safety reset feature, light weight, elimination of lamp cycling and quiet, cool operation. Models are available as "no feet—side lead exit," "feet with side lead exit" and "studs with bottom lead exit." Slim Lite ballasts can be remote mounted and carry a five-year warranty.



Circle No. 15

Boca Flasher

Boca Flasher LED lighting strips are great replacements for many conventional lighting situations. Boca's light strips are available with five standard colors in single or double rows. The extended life of LEDs, coupled with the energy savings and high output, makes Boca's strips a tremendous addition to many projects.

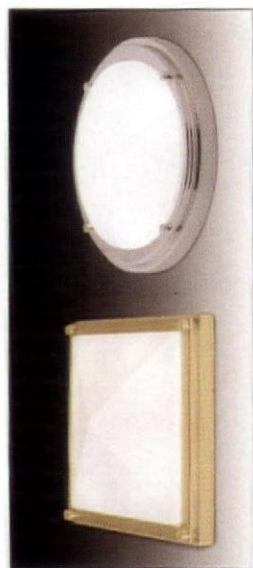


Boca Flasher is a U.S.-based company focused on the manufacture and distribution of LED lighting products for the architectural, retail, display and entertainment industries. The company's current product line includes low-wattage, high-output LightBulbs, LED Linear Strips, Color Changers and MR16 Replacement Lamps.

For more information, visit www.bocafasher.com.

Circle No. 16

Davis/Muller



Davis/Muller introduces the round 2210 and square 2215 Series of surface-mounted fixtures. Their shallow, ADA-compliant depths make them equally appropriate for wall or ceiling mounting. Three sizes along with several lamping options ensure proper scale for virtually any application.

Each with a subtle, fully sealed spill-light, the simple geometric designs of these fixtures lend themselves to many creative applications. Mount them in grid or row configurations or combine in alternating patterns of rounds

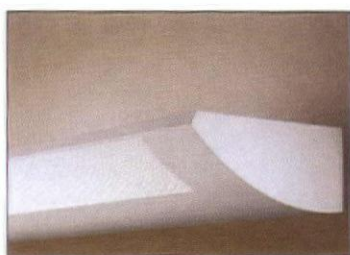
and squares. The square fixtures may also be rotated to a diamond orientation. Polished, satin and painted finishes are available.

See our ad on the back cover; visit our website at www.davismuller.com.

Circle No. 17

Litecontrol

The Litecontrol SAE (Simple-Affordable-Efficient) product line now includes a new Wall SAE fixture and an SAE 2-ft. sconce. This gently curved indirect wall fixture offers



a choice of perforated or slotted housings with precision-tooled, steel construction and includes an advanced, high-efficiency reflector system that produces a smooth gradient of light. Now with a variety of moderately priced pendant- and wall-mounted fixtures, the versatile SAE Systems product line offers a broad range of choices to complement many architectural designs and interiors.

W-AI-96P has a perforated housing for a soft brightness, available in 3-, 4-, 6- and 8-ft. lengths plus a 2-ft. sconce. W-AI-96S has a series of 1/8-in.-wide vertical slots for a slightly brighter design statement. Lamping options include T8, T5 and T5/HO for the 3-ft. and longer lengths, T8 and compact fluorescent for the 2-ft. sconce.

Circle No. 18

Luraline Products Co.



Luraline Products Co. presents Facets, part of the new Designer Series set to debut at Lightfair 2001. A trio of classic industrial designs, Facets brings retro flair to all types of indoor, outdoor, residential and commercial applications.

Available in ceiling-, pendant- and wall-mount configurations with a choice of incandescent, halogen or compact fluorescent lamping, Facets features a unique "faceted" finish in five shades plus black and white, with custom color matching on request. The cylindrical "bullet" diffuser is offered in clear or satin-etched prismatic glass with optional zinc-plated wire guard and perforated aluminum enhancement. Facets is constructed of heavy-wall, spun aluminum with cast zinc alloys and is suitable for wet locations with the exception of bare-lamp models.

For more information, phone (800) 940-6588 or visit www.luraline.com.

Circle No. 19

Sunnex, Inc.

The new SoHo Collection by Sunnex adds style to any home or office. The lights come in a choice of different-size lamp heads, wattage and a variety of colors. The small base takes up very little space, allowing more room for documents and other desk accessories.



Sunnex, Inc. is a leader in the design and manufacture of high-quality halogen lighting products. The company's products are used in a variety of applications including commercial and residential task lighting. Most of its lamps are backed by a five-year warranty. In addition to its standard products, Sunnex also offers custom configurations.

For more information, contact Sunnex at 3 Huron Drive, Natick, MA 01760, phone (800) 445-7869, or visit us at www.sunnex.com.

Circle No. 20

www.lightsearch.com

CLASSIFIEDS

REPS WANTED

OEM Rep Opportunity

New opportunity to represent Far Eastern Manufacturer for OEM work for U.S. Lighting Manufacturer. Lines available: LED's Electronic Controls, Remote Controls, Plastic Injection Molding, Aluminum and Zinc Die Castings, Power Supplies, Lamps, Contract Assembly, Spinnings/Reflectors, Sheet metal. **Full Commissions.**

Contact:

Eastern Industries Group, Inc.
3411 Bernese Ct., Carson City, NV 89705
PH: (775)267-4425; Fax:(775)267-4413
Email: FMa1026721@aol.com

Use our Convenient Fax Number to Send Us Your Ad Copy:

212/279-3955

LET CLASSIFIEDS WORK FOR YOU!

ARCHITECTURAL LIGHTING:

ONE PENN PLAZA - 10th FLOOR

NEW YORK, NY 10119 OR CALL

800-950-1314 EXT. 2727

ADVERTISER	PAGE	CIRCLE NO.
Aromat Corp.	32, 44	13, 15
B-K Lighting, Inc.	33	14
Boca Flasher	44	16
Bruck Lighting	1	2
Con-Tech Lighting	11	7
Cooper Lighting	Cov. 2	1
Davis/Muller	44, Cov. 4	17, 22
Elliptipar Inc.	29	11
Leucos USA	15	9
Lighting Services Inc	5	4
Lightolier	13	8
Litecontrol Corp.	44, Cov. 3	18, 21
Luraline	45	19
NoUVIR Research	31	12
Prescolite	6-7	5
Sunnex	45	20
Super Vision International	9	6
Valmont	17	10
Visa Lighting	3	3

Publisher is not liable for errors or omissions.



What Does LC Really Mean?

BY DAVID A. MINTZ, FIALD, FIESNA, LC

According to the National Council on Qualifications for the Lighting Professions (NCQLP), "LC" means Lighting Certified. Okay, what does "lighting certified" mean? Read the following statements taken from the NCQLP website:

- *The NCQLP has established a certification process by which practitioners in lighting and related fields, through testing, demonstrate their knowledge and experience in lighting.*
- *... the NCQLP recognizes qualified lighting practitioners through the Lighting Certified (LC) credential.*
- *The LC credential is a minimum multi-disciplinary qualification distinguishing practitioners in the specialized field of illumination.*

Absent a further definition of terms such as "practitioners in lighting," "qualified lighting practitioners," "knowledge and experience in lighting" and "specialized field of illumination," a reasonable person will assume that someone using the LC designation is a competent lighting designer. In fact, many, if not most non-lighting people, think that LC means "Lighting Consultant."

"The NCQLP should require the holders of the credential to use it ethically & responsibly."

But wait! The NCQLP also says, "...LC is not a specific qualification in highly specialized practices such as lighting design, survey and auditing or lighting product manufacturing." I read that to say that a "qualified lighting practitioner" is *not* qualified in "highly specialized practices such as lighting design."

At best, this is hair-splitting of the highest order. At worst, it allows minimally qualified persons to declare themselves as equals to highly experienced lighting designers with years of actual design experience. Does this actually happen? Yes. Recently, a lighting consultant with the LC credential was fighting off an improper substitution on an important project. The sales representative wrote a letter claiming that the consultant was incorrect in writing the specification and that his product was better suited to the needs of the project. The letter was signed, "Joe Blow, LC." Same credential as the consultant! Of course, the sales rep had not attended any design meetings, prepared any layouts, done any calculations, interviewed any users—you get the point.

There is another side to this story. The International Association of Lighting Designers (IALD) was founded as an organization for independent lighting designers in contrast to the Illuminating Engineering Society (IES), which consisted (and still does) largely of manufacturers,

lamp companies, utilities, etc. The founders of the IALD, of which I was one, hoped to achieve a number of objectives, including group health insurance, professional liability insurance, a standard contract and some kind of certification or licensing.

In the 33 years of the IALD, many important programs have been established including education, ethics standards, membership growth, Lightfair, etc. When the idea of the NCQLP was born, some active and influential members of the IALD supported the idea with the thought that it was better to be part of the process than to stand aside and let it happen without IALD participation. The IALD was instrumental in the formation of the NCQLP and remains an important source of funds.

Now, however, it is apparent to some members of the IALD that LC certification can be used to their competitive disadvantage rather than as a validation of their expertise. Although the NCQLP disavows any claim as a lighting design credential (see above), the clear implication of the LC designation is just that—the holder is "Lighting Certified." Unfortunately, one can attain the LC without ever having designed a single lighting installation.

Is there a place for the LC credential? Yes. It would benefit everyone in the industry if more people were familiar with the technical aspects of lighting. Should the NCQLP do a better job of describing what LC really means and, more importantly, what it does *not* mean? Yes. Most importantly, the NCQLP should require the holders of the LC credential to use it ethically and responsibly.

Is it too late for the IALD to establish a valid credential for lighting designers? As the saying goes, "You can't put the toothpaste back in the tube." The U.S. government is involved with the NCQLP through various agencies and the government does not reverse or change course very easily. Still, a case can be made that such a credential is sorely needed.

Professional membership in the IALD requires four years of senior design experience and a demonstrable body of completed work. That seems like a good beginning. The IALD and the NCQLP, working together, should establish an additional credential that differentiates those who are "lighting certified" from those who are "qualified lighting designers." A clear definition of each credential would let everyone know what "LC" really means. ■

David A. Mintz, FIALD, FIESNA, LC is president of The Mintz Lighting Group Inc. The author's opinions are not intended to represent the IALD or NCQLP.