

THEATRICAL LIGHTING TECHNIQUES IN NON-THEATER ENVIRONMENTS

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In theatrical, entertainment and architectural environments, lighting plays the lead supporting role, setting the stage and creating artistic illusion. The lighting must control the focus of attention, emphasize rhythm and structure, and establish mood and realistic elements.

In theatrical environments, however, the lighting scene is kinetic; the focal point is

always changing, along with the design goals, from moment to moment, requiring a layered, flexible lighting system and design. In entertainment environments, the lighting often must create an even stronger experience, and may be the focal point itself with spectacular effects. Both types of lighting, often interrelated, can provide a dramatic identity for a commercial or residential building or space as well as a signature element.



UNIVERSITY OF BALTIMORE MEDICAL CENTER

The concept: To create an environmentally inspired lighting design for a play space in the pediatrics wing. It's fun and exciting yet comforting, simulating the magic and surprise of a protected forest grove with interactive play areas for children and places of respite for adults.

To achieve the effect of a sunny day in the forest, lighting designer Steven Rosen adapted theatrical design solutions for permanent installation. The illusion of a north sky is created by using non-fading blue glass filters in PAR30 adjustable floodlights. In contrast, MR16 framing projectors, fitted with tree branch patterns and amber glass filters, simulate streaming sunlight. Employed in opposite directions, these two distinct lighting "paint brushes" produce an array of secondary shadows and strong accents. To enhance the illusion, the framing projectors are located in the ceiling, concealed from view; the higher angles also limit glare in the participants' eyes. Recessed PL13 wall washers, illuminating the perimeter walls, enclose the space in a soft, warm light—a cozy alternative to typically stark hospital corridors.

Photo by Ed Howe; Interior Design by Anita Rui Olds & Ed Howe; Lighting Design by Available Light

THE "WOW" FACTOR

How do theatrical techniques benefit a commercial project? "A theatrical approach enables the lighting designer to sculpt a space and carve out the interesting architectural features by emphasizing texture and integration of design," said Pat Gallegos, principal, Gallegos Lighting Design. It can create strength with subtlety, drama with flexibility and sophistication with simplicity.

"The world tends to be going a lot faster," said Steven Rosen, principal designer and president of Available Light. "As technology edges forward, the public seems to want a constant barrage on their senses, whether with music, film, video, virtual reality or the Web." In order to get attention and maintain it, the lighting designer must consider what is the most cutting-edge way to create a compelling environment. "It's the 'Disneyfication' approach," noted Rosen.

Theatrical techniques and treatments and the use of drama and kineticism to attract people is on the upswing. Fountains, sculpture, artwork—usually some type of cultural enticement—exists within a public space; one of the things theatrical lighting can do, either unto itself by creating a lighting sculpture, or as a supporting element, is to create a dynamic identity. And not only as part of the interior design; as higher-tech lighting tools are becoming outdoor related, clients are requesting an immediate "punch" at the entrance of a building or property. (See "Fleet Center.")

KEEP THE DESIGN SIMPLE

While theatrical lighting can noticeably enhance a design, two issues must be considered



ors and an adjustable diffusion element producing a colorful, lively and dynamic lighting presentation across the logo and the large glass wall. The resultant play of light off both the sign and adjacent glass produces an ever-changing rippling watercolor effect.
Photo by Barbara Hakim; Installation by BN Productions

FLEET CENTER

In Boston, owners sought a unique lighting treatment for their Fleet Center logo, made of white steel letters mounted on the surface of a glass curtain wall facade. The sign is visible from the adjacent downtown expressway, across the harbor and beyond.

The lighting concept, developed by Steven Rosen, was to dispense with traditional nighttime sign illumination and develop a theatrical sequence of lighting cues that is exciting and unique. Four computer-automated fixtures (Irideon's AR500), which incorporate a variable percentage dichroic color changing system, are built into an exterior architectural package; the source is metal halide.

The lighting show is comprised of a preprogrammed sequenced cue loop that continually and variably mixes the proportions of both the secondary color and an adjustable diffusion element producing a colorful, lively and dynamic lighting presentation across the logo and the large glass wall. The resultant play of light off both the sign and adjacent glass produces an ever-changing rippling watercolor effect.

up-front, and according to Gallegos, certainly require the commitment of the client: maintenance and additional cost. "Maintenance can be a big deal," said Rosen. "First of all, theatrical lighting fixtures generally do not have the lamp life of, say, a 20,000-hour metal halide source. So the people paying for them are not only obligated to come up with the capital dollars to purchase the equipment, but to maintain it."

He added, "There's initial euphoria about doing this kind of work but then when it comes down to taking care of it, the excitement often falls off." Often, it's a matter of technical know-how. One solution is to encourage clients to form a relationship with a local theatrical rental and/or sales shop and develop a service contract. Another is to hire trained technicians who also have the ability to troubleshoot a problem.

In terms of cost, be up-front. Convince the client that the payback is often worth the extra money and that "investing in a theatrical-type fixture to achieve a certain effect can be more cost-effective than using a few traditionally architectural fixtures," according to Gallegos.

But be conservative in your design. "Often, the client becomes excited by the prospect of entertainment lighting and wants to include it in every square inch of the plan," said Rosen. Reining in the enthusiasm will not only help contain costs but will lead to a simple and clear design statement. "Overkill only dilutes the message." Theatrical techniques, for example, just in the lobby, or at the fountain, make a much bolder statement when set against a backdrop of purely architectural lighting. (See "University of Baltimore Medical Center.")

The biggest enemy of theatrical light-

ing is ambient light and that's something designers must consider very seriously. Drama is created best by starting with a black space—the absence of light—the way it's done in the theater. When dealing with theatrical lighting in architecture, finding ways to use spaces that either have fewer windows, or some sort of automated lighting control, is best. "Or, consider the space as having two 'faces,'" said Gallegos. "One for day, one for night."

TECHNOLOGY & FIXTURES

"Theatrical fixtures offer more flexibility in terms of aim, focus, direction and shape," said Gallegos, "and tend to produce a more evenly distributed and easily controllable beam that can be soft- or hard-edged, colored and patterned." These fixtures can also maintain the integrity of the beam for a longer throw—a feature especially useful in atriums and lobbies. In addition to control, theatrical fixtures allow manipulation and variety.

Developments in technology are allowing fixtures, control systems and lighting techniques used predominantly in the theater to be integrated into architectural lighting schemes to produce more varied effects. Often, equipment is no longer strictly defined as theatrical or architectural—it comes down to a matter of function. A rich palette of lighting resources has evolved in response to the growing trend and requests from clients, and many designers have expanded their toolbox.

While theatrical equipment can achieve plenty of "magical" effects, the lighting designer must remember that it is he who orchestrates the display. "Designers work in a sensitive artistic medium," said Rosen, "and must understand light and how to use it as a communication device. Have a vision and then use the technology to help you realize your concept, but don't rely on it to create it."

INSTALLATION IDEAS

More and more organizations are looking for new and stimulating ways to attract a sophisticated clientele to their event or venue; this competitive atmosphere continues to dissolve the line between theatrical spectacle and corporate marketing. A museum, property developer or major nonprofit organization can benefit from presenting itself in a compelling visual environment, according to Rosen. Architectural environments conducive to theatrical lighting techniques include:

- *Athletic arenas:* Capitalize on the sense of excitement theatrical lighting can provide.
- *Casinos & hotels:* Entertainment is the name of the game. Create compelling environments with the use of theater magic.
- *Conference centers/auditoriums:* Take advantage of the sculpting techniques of theatrical lighting to make lecturers appear more dynamic.
- *Hospitals/healthcare facilities:* Emphasize color and movement; this dynamic can help relax patients in an otherwise high-stress environment.
- *Museums/cultural institutions:* Science, technology and history museums and visitors centers most benefit from the enhancements of theatrical lighting.
- *Public spaces:* Lobbies, parks, fountains, movie theaters—create an identity.
- *Public works projects:* Bridges, tunnels, subway systems, etc. all present potential. Sculptural structures can be enhanced.
- *Residential:* Some ideal spaces for theatrical lighting include game/recreation rooms, landscaping, galleries.
- *Shopping Malls:* Theatrical lighting can be used to distinguish one public gathering over another.
- *Retail:* From greeting card stores to automobile dealerships, the sky's the limit. What better way to one-up the competition? ■