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ENERGY STRATEGIES IN ARCHITECTURAL LIGHTING

IN THE WHEELHOUSE
RIVERS CASINO'S WHEELHOUSE BAR & GRILL, Pittsburgh, Pa.

LOCATED IN THE HEART OF PITTSBURGH'S STADIUM DISTRICT, THIS ATYPICAL SPORTS BAR STRIKES GOLD WITH AN ELEGANT, BUT EFFICIENT LIGHTING DESIGN.
WHEELHOUSE

Projects: Wheelhouse
Owner: Rivers Casino
Location: Pittsburgh
Architect of Record: Bergman Walls and Assocs., Las Vegas
Interior Designer: Floss Barber
Electrical Engineer: ME Engineering
Installer: Kirby Electric

Challenge:
Rivers Casino's Wheelhouse Bar & Grill, a sports bar featuring more than 40 flat screens, offers numer- ous environments catering to different types of patrons, all of which had to be properly lighted. The big- gest challenge, however, was not the audio-visual elements nor the rich diversity of materials specified by Floss Barber, but instead integration with daylight entering the space through a large glass curtain wall, enabling 24/7 operation.

Solution:
Lighting design firm Illuminating Concepts provided a lighting design that attracts patrons, provides functional lighting on critical task surfaces, establishes a brand and atmosphere that is distinctive from the rest of the casino, and is easily controllable, enabling the lighting to integrate well with variable daylight contribution.

RIVERS CASINO, WHICH OPENED
in August 2009, is one of nine operating casinos in Pennsylvania. Located along Pittsburgh's North Shore near Heinz Field, the casino offers guests nearly 3,000 slots, 86 table games, nine restaurants and bars, a riverside amphitheater and live music performances.

The project ran into financial trouble during the global credit collapse of 2008, resulting in an investment group led by Chicago billionaire Neil Bluhm taking over the project. The new owners found much of the casino design and direction already established.

Wheelhouse Bar & Grill was the last venue to be designed and implemented within the base build-out, giving Greg Carlin, CEO of Rivers Casino, the opport- unity to have an impact on its design from start to finish.

Named for the sweet spot in a baseball player's swinging range, Wheelhouse is a high-tech sports bar featuring more than 40 flat screens for viewing multiple games, and a high-definition theater with the largest floor-to-ceiling TV in Pittsburgh. Located in the corner of the casino overlooking the Ohio River and Heinz Field, the bar accommodates 300 patrons between the bar and individual tables and booths, and offers an outside terrace with fire pits, lounge area and uninter- rupted city vistas.

The building designed by Bergman Walls and Assocs., and Strada Architecture, provided the shape of the outer walls and associated kitchen area. Turning this blank page into a "sports lounge" would require a complete fitout design process. The owners engaged interior designers Floss Barber to provide space planning, design direction and functionality for the environment.

"Wheelhouse has its own play- ful, but powerful spirit—separate..."
SWEET SPOT

A step up from the typical sports bar, this high-tech taproom features a well-conceived and energy-efficient lighting scheme that hits a home run.

Sergio Chero/DiGIO Photography
Photography: Eric Laignel Photography
from that of the casino," says Ellen Levin, project manager for Flora Barber. "It’s a next-generation sports bar where you can enjoy viewing a variety of broadcasts alone, or on a date, in a group or at a party."

Recognizing the importance that good lighting would have in creating the right atmosphere for the bar, Flora Barber engaged Illuminating Concepts to do the lighting design, emphasizing strong collaboration between architecture, lighting and media to ensure they worked together seamlessly.

"Architecturally, the project needed to provide numerous environments within a single venue and present a comfortable space where customers can "see and be seen," says Mark Borus, studio director for Illuminating Concepts. "It was necessary for the dining, bar environment, lounge and flexible entertainment to flow together to create a harmonious space. The lighting was designed to support the architecture and the media plan. With the numerous display screens in the space, lighting needed to provide a layout free of lamp and reflector image, while being circuited and programmed for the various operational requirements."

Borus points out that the biggest lighting challenge, however, was coordinating the lighting with the southern exposed 18-ft-high glass curtain wall. Although this feature provides amazing city views, a combination of a Mecho-Shade window shading system...

TV CENTRIC

"The lighting was designed to support the architecture and the media plan, which meant it needed to provide a layout free of lamp and reflector image."

—Mark Borus, Illuminating Concepts

MAIN DINING ROOM (BELOW)
Philips Color Kinetics eW Powercore cove lights provide illumination in the canopies above; Bartco TS striplights are integrated into the backboad of the booths and tables.

SETTING THE STAGE (ABOVE)
Stage lighting utilizes traditional halogen stage panels by ETC, color-changing LED PAR lamps by James Thomas, and automated moving lights from Martin Professional.
and emphasis on easily dimmable halogen as the primary light source was required to enable the lighting to adapt to the gradual change from day to night. The curtain wall also drove the selection of the central video display system, enabling 24-hour operation and viewing without glass or brightness concerns.

"When developing a space program that requires a high level of integration of both lighting and audio-visual elements," Borus says, "it is important to consider surface brightness resulting from external light sources—i.e., daylight—and interior light sources to create an environment that is visually balanced and does not distract one's attention from the primary focus—relaxing and watching the game."

The final lighting plan resulted in a variety of solutions depending on the space; the main dining room is illuminated by a combination of Philips Color Kinetics warm white LED eW Cove Powercore cowlights in the overhead canopies. Beltec Lighting's adjustable AR111 recessed downlights in the main ceiling, and Bortco Lighting's T5 fluorescent strips integrated into millwork, particularly the seatbacks.

The 50 ft. long bar utilizes all eW Cove Powercore units to backlight 3form acrylic material, creating a beacon of light, while USAI square trim adjustable MR16 downlighting mounted in the bar canopy illuminate the bar top.

The private booth area is lighted using decorative pendants by Fine Art Lamps, with Bortco T5 strips integrated into seatback millwork and Bruck Lighting's Orion Belt flexible LED cowlight to uplight the banquet and steps.

The stage seating area is illuminated by a combination of USAI MR16 downlights in the
lower canopy ceiling and Belfer adjustable AR111 recessed slot lights in the higher ceiling.

The stage lighting utilizes a combination of traditional halogen stage panels by ETC, color-changing LED stage PAR lamps by James Thomas and automated moving lights by Martin Professional.

All lighting is controlled by a central dimming system by ETC, with remote preset stations for user interface and programming ports for future re-programming.

“From an experiential standpoint, a variety of features and materials, extended by light, provides visual interest,” says Bona. “Light sources were chosen to emphasize the various wood, metal and painted surfaces.”


PRODUCTS USED

- James Thomas (color-changing LED stage PAR lamps), www.jamesathomas.co.uk. Circle 213.