

# Museum of History and Industry

Seattle, Washington

Lighting Designer: **Candela**





**T**he Museum of History and Industry (MOHAI) inhabits a Naval Armory building that was built under Franklin D. Roosevelt's WPA programme between 1941 and 1942, and was used by the United States Navy throughout and after World War II. The property was later transferred to the Seattle City Parks Department, and finally to MOHAI. On the National Register of Historic Places, the building sits on a South Lake Union dock in an area of high nighttime activity. New lighting for the building and grounds has to provide a sense of safety while creating a focal point for the museum, South Lake Union's newest neighbour.

Recent renovations to nearby parks have increased the foot traffic around the building. Its combination Art Deco/Art Moderne style of architecture appeals to a sense of civic pride, recalling historic buildings in "the other Washington". The facade lighting reinforces the hierarchy of architectural elements, rhythmically highlighting each window on the lower facade with 2700K LEDs, and evenly washing the upper facade with 3000K metal halide. The black roof is lit with blue LEDs (MOHAI's signature colour) to keep it from disappearing into the darkness at night. 75 percent of the exterior lighting is LED, and the rest is ceramic metal halide, ensuring minimal maintenance into the future.



In-ground twinkle lights activate the plaza for pedestrians during nighttime and LED steplights mark the stair treads. The original 1939 plan set included sketches for the "eagle lights" on the cheek walls flanking the main entry, but they were never built. As part of this project, they have been fabricated to match the previous (but incomplete) design. This modern interpretation includes fluorescent lamping behind art glass diffusers, and a niche at the back, which conceals 2700K LED uplights that highlight the pair of Navy insignias.

New canopies instill a feeling of intimacy and shelter for exterior events on the plaza. LED uplights with linear spread lenses mounted to the canopies' structure allow soft, reflected light to frame the space. Banners illuminated with in-ground metal halide uplights allow the museum to advertise upcoming events. Two-foot long LED uplights, used to highlight each window, are custom-cut into the sills. This modification to the building has been approved by the Seattle Landmarks Commission.



Since MOHAI hosts nighttime events most days of the week, the exterior lighting is programmed to turn off at 10pm on weekdays and 11pm on weekends. At 0.17 w/SF (including facade lighting), the exterior lighting uses 45 percent of the allowed wattage. The project has been awarded LEED Platinum.

The executive staff at MOHAI had an expectation that this building would become a new icon for Seattle. Interior lighting that responds to the architecture, as well as the multifarious needs of the exhibits and the owner—from harmony with the surroundings, to the lowest energy use possible for the time, to lighting controls that allow infinite combinations and synchronisation with the AV elements—allow the museum to operate efficiently now and well into the future. Carefully executed exterior lighting accentuates the building's form, letting it stand firmly and sedately, contrasting with the cacophonous cityscape surrounding it. ■