MIDVALE SENIOR CENTER



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to be fertile ground for architectural inspiration. The Utah city was once an industrial/mining/agricultural center, as well as an important railroad hub. Commerce led to the hotels, boarding houses, saloons, schools and people who made Midvale City's Old Town a thriving community. However, Main Street, where the senior center is located, had "fallen on hard times" over the years, says Brennan, thus one goal of the new facility "was to bring back Main Street as a destination. The senior center's design responds to the historical prominence of Main Street." The heavy use of copper and finished wood materials, along with a replica grain silo that houses an emergency staircase, are an homage to that past.

The lighting plan by EELD's Mansour Aghdasi ensures that these architectural flourishes are emphasized. For the lobby, which has two façade materials—copper on the outside, finished wood on the inside—"we went for a minimalist approach, using small aperture downlights for the exterior lighting to draw more attention to the architecture," Aghdasi explains. Brick is used liberally on the façade adjacent to the lobby. Here, low-profile wall sconces provide sufficient light for the walkway, while accentuating the brick to give the building a welcoming feel.

HANG IN THERE

A suspended piece of artwork in the lobby, visible from outside the building, is the architectural centerpiece of the project. A nod to the city's industrial past, the piece is modeled after an inverted open-pit copper mine and comprised of thousands of beads on decorative chains finished in copper, stainless steel and bronze that hang from the ceiling.

The challenge for EELD was how to light it. "Mansour turned his conference room into a workshop," says Brennan. "We had to do thorough mock-ups to light it uniformly," adds Aghdasi. "We asked the artist to provide bead sam-









- 1. Lobby artwork—consisting of illuminated chains finished in copper, stainless steel and bronze—is meant to symbolize an inverted open-pit copper mine.
- 2. This faux grain silo, an homage to Midvale's agricultural history, houses the senior center's emergency stairs.
- 3-4. Even with the emphasis on history, decorative LED pendants over seating areas and pool tables add a modern touch.

ples and to give us 20 or 30 chains." One possible approach was to use a large circular fixture, at least 6 ft in diameter, "but we thought that would take away from the artwork," Aghdasi says.

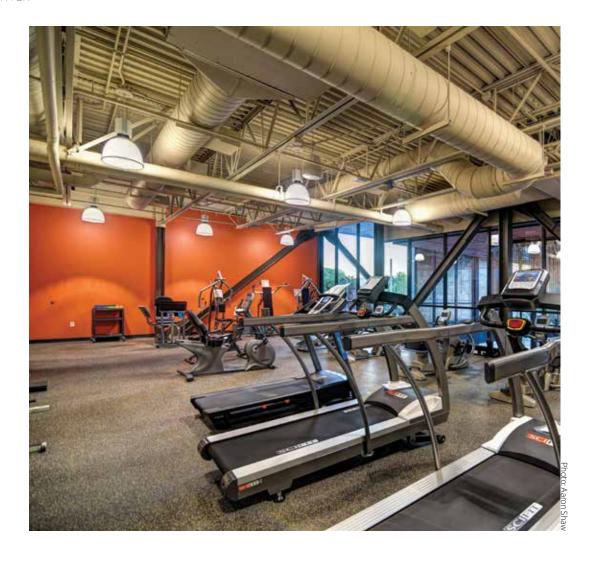
It was on to Plan B, as Aghdasi proposed using 100 miniature fixtures, 1-in. aperture downlights (with a warm 3500K color temperature), to light the piece. Budget considerations ultimately reduced the number of fixtures to 70. The interior ring of fixtures use 50-deg distribution reflectors, while the perimeter fixtures use 30-deg distribution reflectors to ensure enough light hits the bottom of the longer chains on the outer ring of the art piece.

WARM AND INVITING

Dimmable LED luminaires at 3500K were the rule throughout the interior, "giving the building a luminous glow that can be seen from outside," says Aghdasi. The dimmable fixtures are tied to daylight harvesting controls which helped the center beat the IECC 2012 code by more than 20 percent. "We provided a higher lumen output than we thought we needed, and they can dim it down."

Aesthetically, the interior offers a mix of decorative fixtures and more industrial-style luminaires to play off Midvale's history. In seating areas, decorative pendants with a 2-in. canopy are used over the tables. For comfortable stage lighting, a 1-in. niche was created to integrate track lighting into the architecture. Six-in. downlights with decorative glass trims were used to deliver sufficient ambient light and to give the stage a graceful look. In the billiard room, elegant linear decorative pendants over the pool tables provide adequate light for playing surfaces. Adjustable downlights around the space allow senior center staff the flexibility to direct light as needed. Finally, lighting for the exercise room embodies a raw industrial feel. Low-bay fixtures with bottom lenses flow with the exposed ceiling and ductwork overhead.

Low-bay fixtures complement the exposed ceiling in the exercise room.



FAST FACTS

- Designers
 borrowed from
 Midvale's in dustrial history
 when concep tualizing the
 center.
- A minimalist lighting approach emphasizes building materials.
- Dimmable LED luminaires were used throughout.

KNOWING THE USER

Apart from the architectural statement it makes, the lighting design for Midvale Senior Center had another task to accomplish: satisfying the visual needs of an older clientele. "There are two issues with the aging eye," says Brennan. "One is glare, so I worked closely with Mansour, who used software to balance daylight and electric light." Brennan notes that the emphasis on natural light also addresses the Vitamin D deficiency for some seniors. The second issue was using lighting to improve depth perception, for example the ability to safely distinguish stairs. Illuminance levels range from 30-40 footcandles in spaces including the dining hall and multipurpose areas.

Vision, though, took on a different meaning

for a design team that seems to have broken the mold for this type of facility. Says Aghdasi, "I have never seen a senior center that looks anything like this." \square

THE DESIGNERS



Mansour Aghdasi, PE, LC, is principal of Electrical Engineering & Lighting Design, Salt Lake City. He has received multiple IES awards for his work.



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