

The Alliant Energy Center New Holland Pavilions

Best Large Project

The Alliant Energy Center New Holland Pavilions will provide ample space for the World Dairy Expo and the Midwest Horse Fair, arguably the area's two most economically impactful events, for many years to come. While these events are the two biggest beneficiaries, many more events stand to benefit from replacing the site's aging agricultural barns with modern buildings.



Built as part of a public-private partnership with the state and Dane County, the multi-use facility spans 290,000 square feet. One CDA judge characterized the pavilions as “a celebration of industry and agriculture.”

“What I really liked about this project is they infused design aesthetics in a building type that may not have ‘needed it,’” the judge commented. “I would imagine this kind of open pavilion does not often have overall aesthetics that come with it, and I believe they really did it

here.”

The first pavilion, a 90,000-square-foot building, includes nearly 8,000 square feet of pre-function space and 80,000 square feet for livestock stalls, wash bays, and restrooms with showers. A second pavilion measures 200,000 square feet, allowing additional space for livestock stalls, restrooms, and the BouMatic milking parlor.

“It’s a workhorse of a building,” noted one judge. “It blends agricultural, commercial, and industrial elements into a showcase for what Wisconsin does best.”

As part of the design process, building users identified a need for greater flexibility in arranging stalls, tie-downs, and event spaces. To address this, the design team developed the pavilions based on a 60-by-120-foot column grid, providing a massive 120-foot clear span. This grid provides the necessary flexibility needed for large events like the World Dairy Expo and Midwest Horse Fair.

Safety for both the animals and exhibitors was another priority, starting with good indoor air quality. The system brings air into the building from the roof peak, away from odor and contaminant sources; meanwhile, a bank of fans located in a central plenum distributes the fresh air through an array of fabric ducts, made of a washable reinforced plastic, that provide even ventilation across the entire floor area.

Efficiently heating such a large space posed a significant design challenge. Gas-fired infrared heaters were used to uniformly direct heat to the floor, and the ventilation system can be run with a lower airflow rate during winter events. With these features, the facility can now host a variety of gatherings year-round.

Judges felt the use of wood and basic building materials evoked an agrarian quality and served as an appropriate way to brand the buildings, but the design was hardly conventional. "The portion of the building that houses the animals was striking in the way it fits exactly the needs of the users," noted one judge. "It turns the agrarian focus into something that almost has the same quality of a sporting event. It almost looks like you could house a boxing match or a basketball tournament in there."

"Sometimes in Wisconsin, the more conventional solution is the one that gets built," the judge added. "In this case, it's a celebration of the new innovative trends in the business world surrounding Madison."

Project Credits

Location: 1919 Alliant Energy Center Way, Madison, WI 53713

Owner/Developer: Alliant Energy Center

General Contractor: Miron Construction Inc.

Architect/Interior Design Architect: Strang Inc.

Engineer: Strang Inc.

Consultants: SAA Design Group Inc., site and civil engineering; R.A. Smith National Inc. (formerly Arnold & O'Sheridan), structural engineering

Photography: Joe DeMaio

Completion Date: October 2014