

2009 SE² Award Winners



Focus on Energy Award of Excellence

Lussier Community Education Center, Madison, Submitted by KEE Architecture

This project is just plain great. A community meeting and education center, the exterior architecture is superb, the interior spaces appealing and interesting, and best of all, it is a super efficient building in which energy efficiency aspects are apparent but tastefully designed. The SE2 jury likes to see well daylighted buildings, and this one is almost perfect. Using passive solar methods and a sensible amount of glazing, the design employs graceful overhangs to shade from the summer sun while allowing winter sun to enter the building. Both the windows and clerestories on the south façade are shaded, a testimony to the care of the design. Daylighting is so good that electric lights are hardly needed by day. When electric lighting is used, it seems to come from a comparatively small number of tastefully chosen luminaires. The mechanical systems and envelope are equally good. A geothermal energy source is coupled with operable glazing and passive ventilation to achieve superior energy efficiency. The passive solar design of the envelope helps make cooling almost unneeded. When modest, community-oriented projects come out this good in all respects, they deserve top awards. Congratulations to this project in receiving the Award of Excellence from the jury.



Focus on Energy Award of Excellence

The Spirit of Africa Exhibit, Baraboo, Submitted by MSA Integrated Project Delivery

The project, comprised of five acres, five buildings and four exhibits, features aesthetically appropriate and technically proficient structures based on a set of energy concepts that fully realize the available potential of renewable sources and efficiency. It is always a thrill to review a project that achieves this level of integrated energy efficiency, sustainability, and responsible architecture.

The project includes a natural daylighting for interiors, solar photovoltaic electric system, high-mass solar hot water heating system, solar powered water pumps, solar powered electric fencing, and an air to air heat recovery and air exchange system. The jury noted that the project was probably energy-positive considering the efficiency of the architecture. This alone would receive a top award in the SE2 program.

But it gets better. The architecture is designed to capture and reuse of rainwater from both the building roof and from a recycled glass pervious pavement water collection and distribution system. Recycled materials are used for all seating and storage benches and low maintenance native prairie plant species are employed throughout the exhibit.

Each year, SE2 seems to produce a project of exceptional achievement. Zoos and habitats are too often overlooked as a great opportunity, but this project seemed to do everything right. The architectural design that blends the buildings into the site with just a hint of design are exactly the right touch. It is a pleasure to recognize this project with the Award of Excellence.



Award of Merit

First Unitarian Society Meeting House, Madison, Submitted by Kubala Washatko Architects

This 20,000 square foot addition achieved LEED Gold, making it the highest LEED rated religious structure in Wisconsin. Tackling the challenge of adding on to a classic Wright structure, the design team impressed the jury with its exceptional architectural skill. The integration of the new structure into the site is seamless, with appropriate veneration for the original structure without loss of character or completeness in its own right.

The project's site design has outstanding sustainable qualities. It reduces the impermeable surface on the site, reducing stormwater runoff and employs an integrated storm water management system including an underground water retention system, living (sedum) roof, and rain gardens reduce stormwater runoff. The jury found the aesthetic quality of the site architecture to be outstanding.

The building interiors are also impressive. Fifteen-foot tall interior Red Norway pine columns were harvested from the Menomonee tribe's sustainable forest in northern Wisconsin.

Geothermal heating and cooling, natural daylighting, and ventilation reduce energy demand. The spaces have appealing architecture appropriately expressed in natural finishes. However, the jury did not feel the lighting systems were as well executed, and wished for a more aesthetic solution.

Overall, this is a noteworthy project that demonstrates that additions to even the most historically important architectural accomplishments can also be exceptional architecture that is sustainable and efficient. The jury is pleased to honor this project with an Award of Merit.



Award of Merit

Engberg Anderson - Milwaukee Office, Submitted by Engberg Anderson

This project is a 20,000 square foot, LEED Gold adaptive re-use of the fifth floor of the P. H. Dye house. A former industrial and warehouse building, this eight story structure is being developed into an urban multi-use building, and the project is an excellent example of how to use its old bones for an exciting work and community environment. The space's occupants, architects and interior designers, can use the space as a laboratory for daily learning of how better to design sustainable workspaces.

The project seems to take advantage of the tall exterior windows, giving access to daylight and views to most of the studio work spaces. By moving core spaces to the solar core of the building and keeping studio partitions low, daylight penetration is about deep as the windows will allow on the two fenestrated exposures. Light colored finishes for the majority of surfaces inter-reflect light and contribute significantly to the overall energy efficiency of the design. The design is modest but thorough.

It was especially important to the jury to see lighting done right. A minimum number of lights ensure that energy won't be wasted, and efficient luminaires in the open office area demonstrate efficiency through daylighting controls of the lighting nearest the windows. This simple technique to save energy is too often overlooked, and in the obvious care of this design, this and other details were done correctly. The jury expressed concern about the solar gain and glare issues for which a resolution was not apparent.

Nonetheless, the project was granted the Award of Merit in recognition of superior efficiency and daylighting utilization.



Special Citation

Fox Valley Technical College – Waupaca Regional Training Center, Submitted by Somerville Architects

This project is a 15,000 square foot single story technical college building. The architecture is simple and tasteful with proper solar orientation and sustainable site development. The rooflines, building orientation, building configuration and materials reflect the emphasis on energy efficient and sustainable design. The building's energy systems employ a combination of solar thermal panels, photovoltaics, radiant floor and sunshades.

Architecturally, the project's interiors were not illustrated, such that the jury couldn't really comment on interior design, lighting systems, and other aspects of the overall appeal of the building. There probably aren't many views due to the small windows, but a north facing clerestory glazing system suggests a large percentage of the building area has daylight, which further contributes to overall building efficiency.

From an energy systems point of view, this is an extremely interesting project. Data supports the contention that this is an unusually efficient building shell with impressive renewable energy systems. Given the attention to this part of the project, the jury was moved to honor the project with a Special Citation.



Special Citation

Kohl's Photo Studio, Milwaukee, Submitted by Kohl's

This project was entered last year and having just opened, it lacked energy and use data. The jury asked to see it again in a year, and the data shows that this is a good project deserving a Special Citation.

The building is a professional photography center and includes a number of studios as well as support spaces. It is 100,000 square feet on a single floor, and received LEED Gold for its numerous sustainable features, including recycled and regional materials, minimum construction waste, and indoor environmental enhancements including low VOC materials, increased ventilation, and natural daylighting. The building operates efficiently thanks to well designed systems and building automation.

But what really sets this building apart is on the roof. Apart from the white roof to control solar gain, a large PV array provides considerable renewable energy. Combined with an efficient envelope and smart use of daylighting for some of the studios, this project excels in energy efficiency and received the jury's Special Citation for it.



Special Citation

KBS Construction Office Building, Madison, Submitted by Dimension IV Madison Design Group

This project is the offices of a general contractor and is adjacent to their storage yard in an industrial subdivision. The contractor undertook to use the project to demonstrate abilities in sustainable buildings and to show off workmanship. It struck the jury as very clever, functional, and achieved its goals quite well.

It is also a good example of passive solar design. The simple roof shape belies how carefully daylight enters the space, leaving plenty of room for daylight penetration, mechanical systems, and a wonderfully high ceilinged work space. The amount of glazing is limited, allowing the building to be well insulated. And it is properly set on the site, using orientation perfectly. The problem with inexpensive working spaces is that they often manage cost well but the compromises, while well chosen, were apparent. Overall this is a solid design worthy of recognition and being copied, with a challenge to realize an equally great aesthetic to match the technical excellence. A Special Citation is awarded in recognition of this exceptionally well done project.



Special Citation
Johnson Bank, Brookfield, Submitted by Eppstein Uhen Architects

This 14,000 square foot freestanding bank building received LEED certification. It is very handsome, and the jury felt that the architecture conveys the right image for a modern and ‘green’ bank.

The building is 33% more energy efficient than code. Large windows and tall ceilings ensure deep daylight penetration, and although the amount of window area seems a bit more than needed, virtually all spaces have access to the daylight including the core of the building. The design includes passive shading of the windows and clerestories and the use of light shelves to minimize summer heat gain. Other features of the design include responsible materials and construction practices.

The jury was pleased that electric lighting is restrained and wisely, does not seem to be reinforcing the abundant daylight. We awarded the Special Citation for the success of the layers of daylighting and the openness of the building while maintaining a responsible level of energy use.



Special Citation

234 W. Florida, Milwaukee, Submitted by Pieper Properties, Inc.

The project is a 100,000 sf adaptive re-use of a former industrial building, developed as a LEED rated core-and-shell. The project presently awaits confirmation of LEED-CS Silver. For the jury, a core and shell building is hard to evaluate. Without the interior lighting and other energy using systems to judge, the energy efficiency of the project can't really be assessed beyond the basics. Fortunately, the design seeks to harvest daylight through the original windows, and employs a shell-to-core depth that will permit sidelighting for more than half of the building. The jury took a leap of faith and assumed that the windows were replaced with current insulated low-e assemblies.

Ultimately, the jury's recognition of the project hinged on the architecture. In carefully adding a curtain wall to the east-facing façade, with a shade structure over the entry walk and lower story, the building was given a modern face without losing the historic strength of the rest of the structure. Considering the challenges of adapting and re-using older structures, we felt that the architect and owner made all the right decisions, resulting in an attractive and sensible building that exemplifies smart adaptive re-use. We are pleased to recognize the project with a Special Citation.