



PAUL J. OLSON ELEMENTARY SCHOOL MADISON, WI

48% Less Water Use

72% Of Construction Waste
Diverted From Landfill

91% Of Wood is FSC Certified

LEED® Facts

Paul J. Olson Elementary School
Madison, WI

LEED® for Schools 2007
Certification Awarded October 2009

Silver **41/80**

Sustainable Sites 7/16

Water Efficiency 5/7

Energy & Atmosphere 7/17

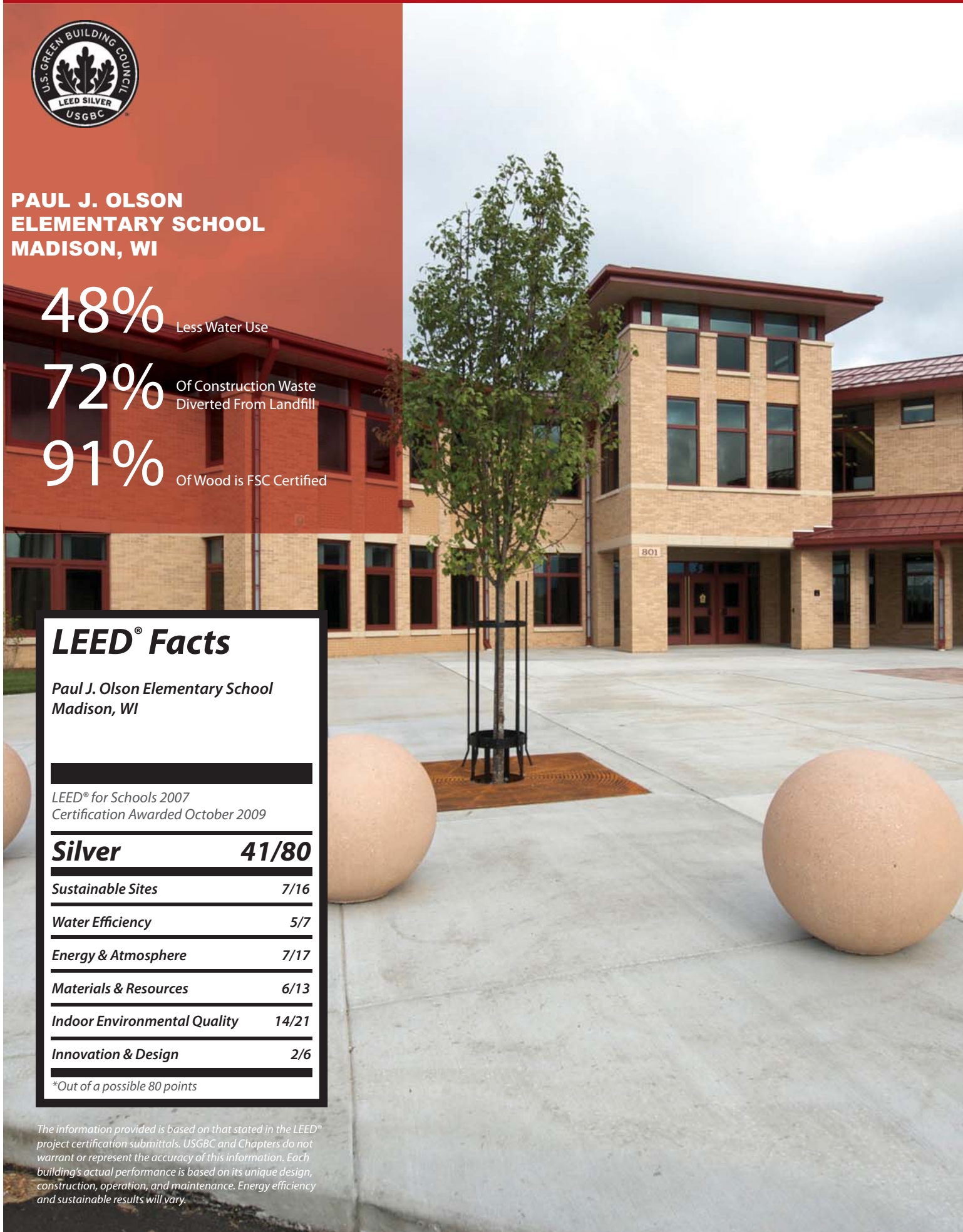
Materials & Resources 6/13

Indoor Environmental Quality 14/21

Innovation & Design 2/6

*Out of a possible 80 points

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.



PROJECT PROFILE

PAUL J. OLSON ELEMENTARY SCHOOL

PROJECT BACKGROUND

In 2005, the Madison Metropolitan School District (MMSD) began planning for a new elementary school to address the rapidly growing west side. They chose the new residential development of Linden Park as the school site not only to support the growing student population, but to function as a community center for this neighborhood and as an extension of the Madison parks, continuing the reputation of being bike and pedestrian-friendly. Designed to accommodate up to 690 students, the school will also serve as an emergency shelter in conjunction with the Dane County Red Cross. During community input sessions, MMSD met with the Linden Park residents who expressed their interest in using sustainable design and construction practices as well as environmentally friendly materials. Residents wanted the school to utilize alternative energies, day lighting and other innovative design strategies that could be used as teaching aids for generations to come. The award-winning Paul J. Olson Elementary School is the first LEED certified school within MMSD.

STRATEGIES AND RESULTS

Paul J. Olson Elementary School was originally designed to seek LEED certification under the LEED for New Construction v2.2 rating system. However, a decision was made by the architect during the construction phase to switch rating systems and certify the facility under the LEED for Schools 2007 rating system. Miron's Director of Sustainable Services was able to help the design team quickly understand the differences between the rating systems, allowing the team to successfully implement additional prerequisite requirements such as Minimum Acoustical Performance. The main focus of the design and construction of the school was to provide a highly productive and healthy learning environment. The ventilation system is filtered by MERV filtration media and provides for six complete air exchanges per hour. Low-emitting materials contribute to enhancing the air quality. Each classroom was acoustically modeled naturally daylight, connecting the staff and students to the natural environment. During construction, a construction indoor air quality plan was implemented, and once completed, indoor air quality tests were taken to prove the quality of the indoor air.

The school is 24.7% more efficient than a conventional school, yielding a total annual energy savings of \$21,827. Features that contribute to the overall energy efficiency include building orientation, exterior sun shelves, natural daylighting, a highly reflective metal roof that avoids heat gain, high efficiency lighting system, a geothermal heating and cooling system, and an on-site 25.2 kW PV system. The PV system generates 3% of the school's energy use (31,292 kBtu/year), providing an annual energy savings of \$2,286.

Throughout the construction process, more than 72% (353 tons) of waste was diverted from the landfill, and re-introduced into the manufacturing process. Approximately 22% of the materials have a pre- and post-consumer recycle content and were regionally harvested and manufactured. More than 91% of the wood purchased for the facility is FSC certified. The site lighting was designed to reduce night-sky pollution, has preferred parking stalls for low-emitting and fuel-efficient vehicles, and has an abundance of open space that is vegetated with native and/or adaptive planting to avoid water usage for irrigation needs. To further increase water efficiency, low-flow plumbing fixtures were selected, resulting in a 48% decrease in water usage.

ABOUT PAUL J. OLSON ELEMENTARY SCHOOL

The staff at Paul J. Olson Elementary School is devoted to engaging the K-5 students in meaningful ways in order to excel academically. In addition, students and staff work together to foster a respectful, responsible and safe learning environment. The new elementary school was named after Paul J. Olson, who was dedicated to conservation in Wisconsin and was appointed to the Wisconsin Conservation Commission by Gov. Gaylord Nelson. He was deeply interested in conservation and education and combined these two, becoming the moving force behind the creation of the 166-acre managed Madison School Forest. He was an outstanding teacher and principal with Madison Public Schools whose career spanned over 40 years.

ABOUT MIRON CONSTRUCTION CO., INC.



Miron Construction Co., Inc., headquartered in Neenah, Wisconsin, with regional offices in Madison, Wausau and Milwaukee, Wisconsin, and Cedar Rapids, Iowa, has been providing professional construction services to clients throughout the Midwest (with an expanded geographical reach across the U.S.) for the past ninety years. Miron Construction Co., Inc., is currently listed 112th among all general contractors in the United States (based on sales and revenue figures for 2009) by Engineering News Record. For more information, visit miron-construction.com.

"The construction of Olson Elementary School was a positive experience for school district administrators and the community. Miron provided experienced and professional staff to manage the project, completing on time and within budget. Miron's regular communication with district staff showed their commitment to project success. The Madison Metropolitan School District, staff, parents and community are very proud of Olson Elementary School and would like to thank the employees of Miron Construction for the outstanding job."

**Doug Pearson , CEM, CFM Director, Building Services
Madison Metro School District**



Owner: Madison Metropolitan School District
LEED® Project Admin: Zimmerman Architectural Studios, Inc.
Commissioning Agent: Sustainable Engineering Group LLC
Energy Modeler: Hardwood Engineering Consultants, Ltd.
MEP Engineer: Hardwood Engineering Consultants, Ltd.
Architect: Zimmerman Architectural Studios, Inc.
General Contractor: Miron Construction Co., Inc.
Project Size: 90,000 square feet
Construction Budget: \$13,000,000
Photography: Weston Imaging Group LLC

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's web site at usgbc.org to learn more about LEED® and green building.

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