



S.M. Wilson Completes New \$11.2 Million R.P. Lumber Center In Edwardsville

by Rachel Brown

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EDWARDSVILLE - S. M. Wilson & Co. has completed the new \$11.2 million R.P. Lumber Center in Edwardsville, Illinois. The state-of-the-art facility provides year-round ice skating, exercise and other recreational activities. The new facility answers the growing demand for “ice time” in the region for hockey, figure skating and recreational skate use. S. M. Wilson served as the General Contractor. Chiodini Architects was the architect. G & W Engineering Corporation was the building engineer. B32 Engineering Group was the ice rink engineer.

The project included construction of the 64,000-square-foot facility, which features a National Hockey League regulation size ice rink with 650 seats, two community spaces for events, seven locker rooms, an elevated four-lane track and a fitness center. Located near Edwardsville High School, the recreational complex also contains a teen center that offers a variety of after-school activities including study space and safe gathering for students.

“The overwhelming response from the community has been great,” said Edwardsville Mayor, Art Risavy. “In all the interactions I had with S. M. Wilson at the rink, I was really impressed with their demeanor and the way they went about their business. On a job like this, you have so many union contractors there at one time. To see everyone doing their job and S. M. Wilson on top of everything was pretty impressive.”

S. M. Wilson maintained the project schedule despite nationwide material supply chain delays by sequencing construction activities. A primary project challenge was the extensive soil stabilization required to support building elements. S. M. Wilson used a combination of lime and cement stabilization to increase the soil bearing capacity.

S. M. Wilson's primary focus was insulation to regulate temperature and increase energy efficiency. This ice rink was constructed over a concrete sub-base that contains several miles of cooling piping lines. The complex construction involves installing heating lines to prevent permafrost and slab heaving and then adding layers of sand, insulation, a vapor barrier and cooling piping positioned between reinforcing concrete slabs.

Once the slab is completely cured, it is cooled at a very controlled rate until a temperature of 17 to 19 degrees is achieved. A very thin layer of ice is applied and then painted. The wear surface is built up over several days by freezing thin layers of water until a 1-1/4 to 1-1/2 thickness is achieved. A dedicated desiccant dehumidifier maintains a 35-degree dew point to keep the ice at the perfect consistency.

This process is facilitated by a complex mechanical chiller system that chills and circulates glycol from a nearby mechanical room. The chiller used on this project was made into a modular assembly and shipped from New York to Illinois for installation. An energy-saving feature on this rink is a dedicated ice melt pit, which melts shavings from the rink surface using the heat created from the refrigeration process.

The new state-of-the-art facility is the third and final phase of the City of Edwardsville's "A Better Place To Play" campaign. The campaign enhanced recreation facilities in the area as requested in public feedback through a survey conducted by the City's Parks and Recreation Department. The new facility is situated next to the Madison County Trail System, providing easy access to outdoor recreation opportunities as well.

The multi-use facility is named in honor of the facility's major donor, Robert Plummer, and his company, R.P. Lumber, an Edwardsville-based full-service retail home center and building materials supplier.



ABOUT S. M. WILSON & CO.

S. M. Wilson is a full-service construction management, design/build and general contracting firm with headquarters in St. Louis and offices in Edwardsville, IL and Cape Girardeau, MO. Founded in 1921, S. M. Wilson is dedicated to going above and beyond expectations for their clients by putting people first. The 100% employee-owned company is one of the leading construction management firms in the Midwest. Areas of expertise include K-12 education, commercial, healthcare and industrial projects. For more information, visit www.smwilson.com.