A Roof with a View

Steel erector relies on Kobelco crawler to place roof panels on new grocery store

awson Steel Erection Co., working for Hy-Vee Weitz Construction, Des Moines, Iowa, is helping build a new grocery store for the Hy-Vee franchise in Kansas City, Mo. The 89,000-square-foot store features an open ceiling design in order to showcase 72 skylights, which will provide natural light for shoppers. This is the second store in the metropolitan area that Lawson has worked on with Hy-Vee Weitz.

Hy-Vee Weitz Construction is one of 13 divisions of The Weitz Co., an employeeowned general contractor with a history dating back to the 1850s. Hy-Vee Weitz specializes in construction of refrigerated and dry storage warehousing, food processing and handling facilities, retail buildings, and rolling remodels of existing stores. The company provides construction services for Hy-Vee grocery stores, currently numbering more than 200, located throughout eight Midwestern states.

On site during the fall of 2010, Lawson Steel utilized an 85-ton CK850-II Kobelco crawler crane equipped with 160 feet of main boom to set the structural steel and lift the roof panels into place.

The roof panels, 85 in all, range from 6,000 to 8,000 pounds. The largest one measured approximately 45'x46'. Two sets of spreader beams, engineered specifically for this application by Lawson, were used to lift the panels.

According to Rick Thomas, Hy-Vee Weitz site supervisor, the crew set 14 panels per day, on average. An old retail center was razed to make way for the new grocery store. Taking advantage of the existing paved parking lot area allowed the panels to be built on site and staged ahead of construction, explained Thomas. This contributed to the pace the crew was able to keep in setting the panels. "With room to work on the ground, we could work on the panels without tying off because the panels were only 4 feet off the ground," said Thomas. The company has a 100-percent tie-off policy for working at 6 feet or higher.

"One set of the spreader beams was used in conjunction with telescopic handlers to move, stack, and stockpile completed panels as they were built on the ground," explained Joe Fortner, vice president of Lawson Steel. The second set of spreader beams, consisting of a 40-foot long top beam attached to two 20-foot beams, was used by the crane to lift

the panels into place.

In the last few days of the roof panel construction, the biggest challenge of the project was contending with the wind. "Panels that size can take off like a kite," said Thomas. "The crane operator has total say on whether we make the lift or not." Fortner added that wind was a bigger issue on the project completed earlier this year in nearby Liberty, Mo. In both cases, an anemometer on the construction trailer helped provide information to the crew. The Kansas City grocery store is scheduled to open in July 2011.

WEST NORTH CENTRAL

Steel erector's crane

The Kobelco CK850-II is the largest crane in Lawson's fleet, which includes another crawler crane, several rough-terrain cranes, and a boom truck. Last produced in 2005, the CK850-II features a high-tensile strength steel carbody with extendible axles. The crawler assemblies can be hydraulically extended for a wide operating stance of 16'3" or retracted for an easier transport width of 11'6". A full hydraulic system performs all crane opera-

> tions, including load hoist, boom hoist, swing, propel, and crawler extension and extraction, as well as counterweight installation and removal. Maximum boom length is 200 feet when the main boom is equipped with a 60-foot jib. Currently available from Kobelco Cranes North America is the CK850-III, which features a Tier 3-compliant engine.

Lawson Steel Erection, Belton, Mo., was established in 1983. According to Fortner, the company's primary business region is the Kansas City metropolitan area. However, the economy has caused them to venture further afield for work. They recently completed a project in Springfield, Ill., and in early 2011 will travel to Springfield, Mo., in the southern part of the state. That job is a two-phase expansion and renovation of the Wonders of Wildlife Museum, located next to the Bass Pro Shops national headquarters.



