

Outside Looking In

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Photos: Tony Soluri Photography

Steel rooftop bleachers give Cubs fans a sturdy perch for watching the game from across the street.

WHILE THE CHICAGO CUBS' 2008 SEASON didn't end quite the way the club and its fans hoped and expected it to, there's one thing the Cubs faithful take enduring pride in: Wrigley Field.

And as anyone who has watched the Cubs on TV or has been to the park knows, not all of the seating is in Wrigley Field itself. Rooftop bleachers on the buildings across the street on two sides of the stadium have been a prominent part of the game-day experience for several years now.

Older stadiums like Wrigley Field require renovation or expansion from time to time, and the same goes for rooftop bleachers. Until recently, the three-story brick residential building at 1010 Waveland Ave.—the left-field side of the park—hosted a small rooftop prefab bleacher system, with a seating capacity of 100 people, that only took up one portion of the roof. This system has now been replaced with a new steel bleacher system, the top of which is 64 ft above street level, that seats 200. The

bleachers occupy the west side of the roof while the east side now contains new amenities including bathrooms, a bar, tables, and food service counters. The entire bleacher structure was made of galvanized W-shape beams and columns. Hollow structural shapes were used for the railings and bar tray tabletops. Shapes included HSS4×4×³/₁₆, HSS6×6×³/₈, and W12×40. The entire project cost \$2.5 million and used 40 tons of structural steel.

The beams and columns of the system, using mostly bolted connections, sit on the existing load-bearing masonry walls. A new concrete roof deck had to be poured over the existing wood-framed roof—2 ft above it—to allow for utilities to run underneath and service the space. The concrete deck was framed out with wide-flange steel beams spanning from bearing wall to bearing wall. As it was challenging to fit the structural system onto the roof walls, laser surveying of the roof was performed.



The bleacher system's beams and columns sit on the building's existing load-bearing masonry walls and a new concrete roof (left). From across the street from Wrigley Field, 200 fans can get a clear view of the action (right).

The existing roof was reinforced with W18x35 and W16x26 shapes for the most part.

The stair systems span from the roof to the upper-most bleacher level and have new footings and foundation walls. The structure also includes steel catwalks from one level of the roof to the other, given the irregular exterior walls of the building and the internal courtyards that provide natural light to the residences facing inward.

While the Cubs' dreams of a World Series didn't come true this year, come spring, fans will no doubt flock to the Friendly Confines of Wrigley Field—and the rooftop bleachers just beyond—to watch their team give it another try. **MSC**

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