

# DensDeck® Prime Builds New Community Home Base

FISERV FORUM, MILWAUKEE, WI



Upon opening in August 2018, Fiserv Forum in Milwaukee, WI, was designed to be more than just an arena: the structure was built to become a central hub for recreation in Milwaukee, connecting communities, neighborhoods, and generations for years to come.

*Not only is Fiserv Forum the home of the Milwaukee Bucks basketball team and the Marquette University men's basketball team, the 714,000-square-foot arena is the hub of entertainment in Wisconsin (hosting up to 200 events annually), and the engine that drives growth in downtown Milwaukee. Future plans for the area are big: in the coming years, a large land parcel surrounding Fiserv Forum will become the largest development project ever undertaken in downtown Milwaukee. A combination of entertainment, residential, and commercial space, this new district will transform the area and serve as a catalyst for additional development.*

## Hard Work Pays Off

Just a few miles west of Fiserv Forum is Langer Roofing & Sheet Metal, a family-run roofing contractor that opened in 1956. From the beginning, the Langer family focused on one simple principle that has served the company well and allowed it to grow to become one of the largest and most-respected roofing contractors in the Midwest: honest work for a fair and reasonable price.

Langer specializes in commercial and industrial roofing projects, which include an abundance of specialty work and historical renovation jobs. Known for setting and keeping deadlines, strong leadership, and experienced tradesmen that are well-trained to stay on top of the latest operating procedures and trends, Langer brings to the table uninterrupted, deadline-oriented job completion. For the 125 Langer employees – to include 110 highly trained tradesmen – no job is too big or too small.



## FAST FACTS

### Component Quantities

- 380,000 sq. ft. of 5/8" DensDeck® Prime
- 380,000 sq. ft. of 1/2" DensDeck® Prime

### Roof System

- 5/8" DensDeck® Prime
- 2 layers of 2.6 SarnaTherm Insulation
- 1/2" DensDeck® Prime
- 80 mil G410 Sarnafil PVC

### Key Companies

#### Sika Sarnafil:

System Manufacturer

#### Populous, HNTB, Eppstein

#### Uhen Architects:

Architectural Firm

#### Mortenson Construction:

General Contractor

#### Langer Roofing and Sheet Metal:

Roofing Contractor

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— Kevin Higgs

Senior Project Manager



This strong, proven work ethic is what brought Langer together with Fiserv Arena, via the bidding process used by Mortenson Construction. Jim Fleming, Langer's chief estimator and director of preconstruction services, began working with Mortenson to submit the Langer bid for the roofing system. The process was a thorough one, requiring additional time and dedication due to its complexity. Once the project was awarded to Langer, senior project manager Kevin Higgs, joined the team.

### The Obvious Choice

From the beginning, DensDeck® Prime Roof Board from Georgia-Pacific was specified by the arena architects, as it is one of the preferred cover board options.

"DensDeck Prime roof board is a product we use on a regular basis" according to Higgs. "The use of DensDeck Prime for this project was extremely important in providing a durable solid surface for the vapor retarder, and PVC membrane."

The roof of Fiserv Forum is constructed of a metal deck, followed by 5/8" of DensDeck Prime roof board, then vapor retarder, then two layers of 3" insulation with a glass coating, then another 1/2" DensDeck Prime roof board, then 80mil PVC.

According to Fleming, the team prefers using DensDeck Prime roof board over competing products because "it's lighter, easier to transport across the work surface, and the product has always performed well for us."

Project challenges were a little different than other projects due to the size and angle of the roof, the fact that the structure itself is wedged in between other buildings, and the extreme pace of the overall build schedule.

"We dealt with the normal challenges of logistics, coordination of manpower, and getting the products to the site with "just in time delivery," said Jim Fleming, Langer's Chief Estimator.

"Once materials were onsite, congestion at the perimeter of the building due to the lift equipment and ongoing construction activities limited our access, requiring our crews to hoist materials to a corner of the roof and manually transport from one side of the massive structure to the installation area. The curvature of the slope combined with the project requirement of 100% tie off provided an opportunity for our crews to find creative ways to increase material handling efficiencies that involved adding a material specific fall arrest line, and modifying 4 wheel roofing carts with tie off connections," Higgs added.

The weather added its own challenges: with the building's close proximity to Lake Michigan, morning fog and dew played havoc with the build schedule.

Looking back on the build, both Fleming and Higgs agree that the DensDeck Prime roof board performed exactly as they expected it to. The product is in use on several other Langer projects, and the team plans to use it again in the future.



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