Energy Efficient and Sustainable Restoration Project Enhances Ford Field





Ford Field Gets Energy Efficient Roof Upgrade



The mammoth domed roof of Ford Field, home of the Detroit Lions and a multi-purpose indoor stadium, underwent an energy efficient upgrade when its roof was restored in 2016 by Beachwood, Ohio-based Tremco Roofing & Building Maintenance.





Diagnostics

In 2015, Tremco Roofing analyzed Ford Field's roof to determine if there were areas of wet insulation, including conducting secondary verification. Results showed that only five percent of the roof contained damaged insulation. This made it a great candidate for restoration.

Staging

The project began almost a year after the original moisture diagnostics, in late April 2016. It took an entire day for a helicopter to make 160 lifts and transport seven flatbed truckloads of material, including hundreds of 50-galllon drums of AlphaGuard BIO.

Repair and Replace

The roof membrane and insulation were replaced in areas where the insulation was damaged, and other necessary weatherproofing repairs were made.

Cleaning

The balance of the roof was thoroughly cleaned with the RoofTecTM cleaning system to prepare it for coating. RoofTec removes dirt, mold and mildew from the roof surface without the negative effects of power washing; it requires little water and recaptures almost all that it does use, which aligns with the Lions' emphasis on sustainability.

MASSIVE PROJECT ENTAILED CLEANING, ROOF RESTORATION, WALKWAY INSTALLATION AND CUSTOM LOGO

THE PROBLEM

Harsh Detroit winters and steamy summers left the roof of the 14-year old home of the Detroit Lions with areas of potential leaks, which could result in wet insulation. Tremco's diagnostic testing was used to determine that a small percentage of the entire 340,000 domed roof was damaged, making it an excellent candidate for roof restoration, rather than replacement.

THE SOLUTION

The Tremco Roofing team, led by Senior Field Advisor James Getzen, proposed restoring the roof with its fully-reinforced, two-coat AlphaGuardTM BIO fluid applied roofing system. The highly reflective, white AlphaGuard BIO system is an energy efficient choice, as it absorbs very little heat and can help to reduce energy use and provide better insulation value. In terms of sustainability, restoration trumps replacement as material is not torn off and sent to landfills. Restoration is also significantly less expensive, and can arrest roof deterioration, which is essential to safety. The fluid-applied system was installed by Tremco Platinum Contractor Schreiber Corporation of Wixom, MI.





AlphaGuard BIO Application

Excellent for use in highly sensitive areas such as an in-use entertainment complex, the low odor AlphaGuard BIO system is easy to apply and cures quickly.

The AlphaGuard BIO base coat was installed in conjunction with a prefab polyester reinforcement,

followed by the white AlphaGuard BIO top coat. The installation took less than 60 working days. A complete replacement project would have taken over nine months and possibly impacted the Detroit Lions' season. A 60 day installation was extremely fast for a project of this size, and a testament to both the system and the Schreiber team's ability and willingness to work 10+hour workdays as well as weekends, weather permitting.

Following installation, non-skid walkways were added along parapet walls and edges to improve safety.

Logo Application

The Ford Field logo was painted in a custom color with Solargard Acrythane.





Complex Project Completed On Time and On Budget

The size and scale of the Ford Field renovation required incredibly complex staging of both material and manpower. Despite the massive scope, the entire project was completed on time and on budget, even with multiple change orders to address the discovery of additional damaged insulation. In keeping with Tremco Roofing's commitment to safety, there were no safety issues or injuries throughout the three-month project, which concluded in time for the Detroit Lions' preseason.





About Tremco Roofing & Building Maintenance

Headquartered in Beachwood, Ohio, Tremco Roofing and Building Maintenance helps manage building life cycles for customers in education, healthcare, government, manufacturing and many other industries. Tremco Roofing and Building Maintenance is a division of Tremco Incorporated, which has been in business since 1928. Tremco Roofing works closely with Tremco Incorporated subsidiary WTI, which provides general contracting and roofing services, and Canam Building Envelope Specialists, which provides air barrier analysis and solutions.

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