



NovaShield®
BRAND

CASE STUDY

RESILIENT SOLUTIONS FOR DEMANDING ENVIRONMENTS. NOVASHIELD DELIVERED DURABILITY, SUSTAINABILITY, AND LONG-TERM PERFORMANCE.



Customer Overview

A powerful derecho destroyed a fertilizer storage structure in Illinois. The client turned to a membrane structure company to rebuild it, relying on NovaShield fabric for a durable and reliable solution.



**Storm
Damage**



**Durability
requirements**

The Challenge

The primary challenge was to construct a storage structure capable of withstanding harsh environmental conditions while meeting the operational needs of the client. The replacement structure needed to provide durability, proper ventilation, free-span space, clearance for trucks, and engineered storm protection. Additionally, the solution had to be sustainable and quickly implementable.

Proposed Solutions

To address the client's needs, they utilized NovaShield, the global leading membrane cladding. With the proprietary ArmorKote technology it offered exceptional longevity against UV rays and abrasion. It has been successfully utilized for nearly 25 years around the world in many difficult climates. The structure was reinforced with hot-dipped galvanized steel to prevent pitting and rust, ensuring longevity even in harsh environmental conditions. This solution provided a sustainable design while offering practical benefits such as quick installation, thanks to NovaShield's lightweight and user-friendly nature. The translucent fabric also created a well-lit environment, reducing the reliance on artificial lighting and lowering energy costs. Overall, the design was tailored to meet the client's operational needs.



Results

The rebuilt structure successfully withstood the demanding environmental conditions while fulfilling operational requirements. The client benefited from a sturdy, weather-resistant design that incorporated proper ventilation, ample clearance for trucks, and long-term storm protection. Additionally, the translucent fabric significantly reduced energy costs by minimizing the need for artificial lighting. The project was completed efficiently with minimal disruption to the client's operations.



**Sustainable
solution**



**Energy
efficient**



**Long-term
value**



“Being a highly corrosive material, fertilizer requires a durable storage solution, protected against deterioration and harsh weather conditions. With sustainable materials and reduced installation time, this was the optimal fertilizer storage solution.”

Conclusion

By selecting NovaShield fabric and the membrane structure company's expertise, the client achieved a resilient and sustainable storage solution tailored to their unique needs. The innovative design not only addressed immediate challenges but also provided long-term value through energy efficiency and structural durability. This case highlights the importance of choosing high-quality materials and experienced manufacturers for critical construction projects.

To learn more about Calhoun Super Structure, visit <https://calhounsuperstructure.com/>