

GREENUMBRELLA®

Project Brief



Owner

Kiowa County School District (USD-422) Pre-K-12 School

Architect

BNIM Architects - Kansas City, MO

An architectural firm seeking a better way with a commitment to long-term thinking and measurable improvement as a way of life. Specializing in sustainable design, this project was a perfect fit.

bnim

Location

Greensburg, KS

Size

120,000 Square Feet

Architectural Application

Educational Building Pre-K-12





Project Description

This LEED Platinum project was part of the plan to rebuild this western Kansas town that was devastated by a 1.7 mile-wide tornado. Using sustainable design and construction in order to live up to the town name - Greensburg. As part of that effort, Greensburg's three schools were combined into a single Pre-K-12 educational institution. Housed in a new green building including such features as architectural concrete flooring, rainwater harvesting, recycled and reclaimed materials, day-lighting, energy drawn from a municipal wind farm and an on-site turbine to supply a quarter of the electrical load.

Goal

Using architectural concrete flooring to add to the aesthetic of a learning environment while being durable and long-lasting.

Specification

DIVISION 03

Section 03 3536

MatureAge Concrete or Retrofit

Section 03 3543 & 03 3536

Abrasive Polish

SECTION 033543 – POLISHED CONCRETE FINISHING"

For CSI specifications contact a consultant:

info@greenumbrellasystems.com



Consultant Corner

As co-founder of Green Umbrella, I was happy to be included on this project. Sustainability and durability were key to the inclusion of architectural concrete floors. Being a LEED Platinum project, Green Umbrella Max Defense system was a perfect fit. The sustainable architectural concrete floor we were able to create is what I am passionate about.

Mark Hurshman
-Green Umbrella Technical Consultant & Cofounder



Contractor Corner



True North Polishing

This project was a major undertaking. Not only the scope of the project, but being among the first buildings rebuilt after the tornado there was little infrastructure in the town when we started profiling and polishing the floors. I am proud of the part I was able to play in creating this incredible school and giving the people of Greensburg their town back.

Seth Whiteley
- Contractor

Challenges

Timing and scheduling were crucial to succeeding on time. With a project of 120,000 square feet, there were tradesmen and laborers needing access to space we were fully occupying while profiling. Good communication and sticking to a schedule were necessary, even when we hit delays or snags.

Lessons Learned

Profiling and polishing an open floor, before interior walls are placed saves days worth of work and gives a more consistent look to the floor. Being able to utilize the heavy equipment across the floor and then have walls installed instead of needing to hand-grind and blend into walls on a project of this scale made a drastic difference.



Green Umbrella® Max Defense™ system wins a high-performance architectural concrete floor with products designed to play well together. Created for owners and design professionals who have experienced the failure of products that do not team well. A system for the success of interior polished concrete @MatureAge™. Uses the GreenCut Abrasives™ system that includes the surface refinement cutting agent GreenCut®. Profile with a conventional grinder or a fitted finishing trowel to see unfair production rates compared to the competition. Process using selected GC abrasives—BigStock™, GC-X™, Fusion™, Eraser™, and PolishPlus™—to create a superior



mechanical foundation defense with any specified class of profile or gloss. The Max Defense system first covers the field with DryShield™, our highly abrasion-resistant flagship densifier that fills the concrete void. Shield & Enhance™ is next in the lineup to protect from salt with superior stain protection. Bring a fantastic finish with Interior Microfilm™, a repairable wear-guard that brings clarity to the profile. Max Defense promotes bonding and cross-linking within the concrete without the negative side-effect of ASR or topical delamination found with other products. Maintain with Green-Clean™ as part of the LifeCycle™ Maintenance system. All of this is "Concrete Floor's Best Game Plan."

CONCRETE FLOORS BEST GAME PLAN

