#### SUCCESS STORY



*Pro-Poxy 2500 was proposed for its excellent workability and rapid strength build-up to reduce interruptions to airport operations.* 



*The three-component Pro-Poxy 2500 meets FAA Specification Item P-501.19.* 

# C DAYTON Superior Pro-Poxy™ 2500 Takes to the Runways

#### SUMMARY

The construction engineering team overseeing improvements to Kansas City International Airport's exterior concrete surfaces needed a high-performance epoxy patching mortar for partial depth repairs that would be able to withstand ground traffic from airplanes and occasional extreme weather conditions. The team selected Dayton Superior Pro-Poxy 2500 because it was also imperative that the product be fastacting to minimize the project's impact on the airport's three runways that can accommodate nearly 140 aircraft per hour.

### CUSTOMER

Burns & McDonnell, an international engineering, architectural, construction, environmental and consulting services firm.

# PROJECT

Kansas City International Airport runway surface repair – Kansas City, MO

# CHALLENGE

Of all U.S. airports, Kansas City International Airport consistently ranks among the lowest in delays. To continue the efficiency and convenience provided to their air carriers, Kansas City International Airport needed to make surface improvements to their runways, taxiways and terminal aprons. Kansas City International Airport hired Burns & McDonnell to provide construction engineering support for the project. This project's unique challenge was to find a high-strength, non-shrink epoxy patching mortar for longer lasting patches with excellent workability. With this in mind, finding a product that would allow for quick application and rapid high strength capabilities to minimize interruptions to airport operations was crucial.

#### SOLUTION

Burns & McDonnell selected the Unitex Pro-Poxy 2500 for concrete surface repairs. The three-component epoxy patching mortar system combines a high quality epoxy



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#### SUCCESS STORY



resin and curing agent with an engineered blend of graded aggregates. Pro-Poxy 2500 is formulated specifically to provide superior patching while demonstrating physical characteristics similar to the concrete substrate. Importantly, Pro-Poxy 2500 complies with FAA Specification Item P-501.19.

"The efficiency of mixing and placing the material allowed for rapid repair work that was essential to phasing," explained Jason C. Fuehne, PE, a civil engineer with Burns & McDonnell. "The effectiveness of the material has also exceeded our expectations. To date, with over 3,400 square yards of material placed in the past two years, we have not had one patch fail."

#### RESULTS

- Contractor realized a 33% time savings in the opening and mixing of Pro-Poxy 2500 over competitive products
- Ease of use allowed contractor to mix product in larger batches and achieve a higher yield of 2.25 cubic feet per batch
- Patched areas were able to accept traffic within 90 minutes of application resulting in minimal airport operational delays
- Quick delivery of product, within 72 hours from order even with large quantities, provided added convenience and uninterrupted productivity for the contractor
- Pro-Poxy 2500 maintains the integrity of the repair over a longer lifespan

# RESOURCES

Learn more about Pro-Poxy 2500 at www.daytonsuperior.com.

# PRO-POXY 2500 PRODUCT SPECIFICATIONS

- Complies with FAA Specification Item P-501.19
- Semi-rigid for shock absorption
- Chemically bonds to concrete
- Provides textured bonding profile
- Compatible with Type III epoxy overlays
- Durable, low modulus
- Withstands freeze/thaw cycles
- High tensile, compressive and early strengths

# RELATED PRODUCTS FROM DAYTON SUPERIOR

- Citrus Cleaner J48
- Pro-Poxy™ Type III DOT



Kansas City International Airport has a remarkable record for on-time operations, and the customer chose Pro-Poxy 2500 to help the airport maintain their status.



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