PROJECT PROFILE

GHENT ROAD RAPID TRANSIT AUTHORITY







PROJECT DATA

Application - Fiber Reinforced Concrete Pavement

Location - Akron, OH

Architect/Engineer – Owner: Metro RTA

Contractor - Perrin Concrete

Concrete Producer – Medina Supply Company

PRODUCTS FEATURED

TUF-STRAND™ SF

Macro-synthetic fibers

SCOPE OF PROJECT

- Eliminate conventional reinforcement in concrete pavement
- Increase durability and service life
- Maintain concrete joint integrity



PROJECT SUMMARY

PROBLEM: In 2005, the Metro Rapid Transit Authority in Akron constructed a new Park 'n Ride facility to accommodate travelers within the cites of Cleveland and Akron, OH. With large loaded transit buses and the need to construct a durable concrete pavement with no service disruptions, a desire to look for value-added opportunities to improve the concrete service life was requested.

SOLUTION: The Euclid Chemical Company, working with the ready-mix concrete supplier Medina Supply Inc., proposed to the concrete contractor Perrin Concrete to consider using **TUF-STRAND SF** macro-synthetic fibers to replace the specified, irregular wire reinforcing on the concrete pavement. With a calculated dosage of 5.5 lbs/ yd³ (3.3 kg/m³), the FRC pavement system was constructed providing a cost savings to the owner. Site visitations in 2008, 2013 and in 2017 have showed little to no deterioration in the corrosion-free pavement with concrete joints intact and performing above expectations with no cracking present.