



EUCLID CHEMICAL

PROJECT PROFILE

TRACTOR SUPPLY



PROJECT DATA

Location – Olive Branch, MS
Application – Fiber reinforced slab
Architect – Oxford Architects
Engineer – Wise Engineers
Contractor – Bowman Works Concrete
Ready-Mix Supplier – Mississippi Material Corporation
Total Area – 22,000 ft² (2,050 m²)

PRODUCTS FEATURED

PSI™ FIBERSTRAND™ REPREVE 225
Micro Synthetic Fiber

TUF-STRAND™ SF
Macro Synthetic Fiber

SCOPE OF PROJECT

Interior floor slab with combination of micro and macrofibers to demonstrate benefits of fiber versus wire mesh and utilize a new sustainably resourced microfiber made from water bottles.

For this project, over 3000 plastic bottles were diverted from landfill operation and used in the reinforcing of the concrete slab.



RUNNER UP
2022 INNOVATIVE FIBER
PROJECT OF THE YEAR
(MICROFIBER CATEGORY)

PROJECT SUMMARY

Located in Olive Branch, Mississippi, the Tractor Supply Company recently constructed a new store where the owner expressed concerns about the cost and value of using welded wire mesh. Euclid Chemical offered a fiber solution, including PSI FIBERSTRAND REPREVE 225, an innovative recycled synthetic microfiber for plastic shrinkage crack control, combined with TUF-STRAND SF, a macrofiber used to replace conventional reinforcement and provide post-crack residual strength. With TUF-STRAND SF already used for the exterior pavements at Tractor Supply, the interior retail floor of 22,000 ft² (2,050 m²) received this combination of fibers with an emphasis on sustainability. PSI FIBERSTRAND REPREVE 225 is a polyester microfiber that has been resourced and manufactured from plastic bottles. For every pound of PSI FIBERSTRAND REPREVE 225 that is used in concrete, 9 ½ plastic bottles are diverted from landfills (21 bottles/kg of fiber). Compared to virgin processed polypropylene fiber, PSI FIBERSTRAND REPREVE 225 helps to offset the use of petroleum, emitting fewer greenhouse gases and conserving water and energy in the process while improving the durability of concrete and can be used for driveways, mass concrete, poured walls and any applications where plastic shrinkage cracking in concrete is a concern.