

SUCCESS STORY

Ergon's eTac HB Restores Circuit of the Americas Racetrack

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CHALLENGE

Needed trackless bond coat to minimize cleanup; maximize safety

SOLUTION

eTac HB Hot-Applied (Trackless) Bond Coat



LOCATION

Racetrack in Austin, Texas



DISTRESS

Longitudinal cracking, raveling and loose aggregate



TRAFFIC

Consistent high-speed racecar traffic



AGENCY

Circuit of the Americas (Owner)



CONTRACTOR

Lone Star Paving



SUPPLIER

Ergon Asphalt & Emulsions (eTac HB)

Background: Circuit of the Americas outside Austin, Texas, represents 5.5 kilometers of high-octane speed (3.426 miles to be exact). The dynamic, 20-turn course was built to host the United States Grand Prix, among other high-profile races. It is important for this track to remain in pristine racing condition, both for the safety and satisfaction of drivers as well as the hundreds of thousands of spectators watching from the stands and on TV or their devices. It's easy to forget that racing is actually a team sport, a unique synergy of driver and pit crew working together. Track maintenance is a team sport as well — and Ergon was pleased to be a major player on the latest resurfacing project at Circuit of the Americas.

Understandably, nearly a decade of blistering racecar traffic had taken its toll on the track. In addition to longitudinal cracking, the roadway was raveling in places and producing loose aggregates, a dangerous safety hazard. That's why project leader Lone Star Paving called on industry leader Ergon A&E for assistance with repaving efforts. Ergon A&E is no stranger to paving high-profile roadways, having supplied our formulation of PG 82-22 for resurfacing at Texas Motor Speedway in Fort Worth, and also for Talladega Superspeedway in Alabama. For the Circuit of the Americas project, however, not only was our PG 82-22 used, but our revolutionary eTac HB bond coat was used as well.

"Bond coats are used to promote adhesion between two asphalt layers," said Ergon A&E's Phillip Moss, P.E. "We find that eTac HB provides superior bond strength over traditional coats, and without the tracking associated with conventional bond coats. It was important for this project to leave as little tracking as possible to minimize cleanup and maximize safety as well as to enhance the aesthetic quality of the track."

eTac HB is a hot-applied bond coat that is trackless in seconds, even at extraordinarily high shot rates. The product is also easy on equipment, helping to keep job sites cleaner and reducing cleanup time. This versatile bond coat can also be applied at lower temperatures than typical hot bond coats, increasing safety for construction crews and eliminating the need for specialized equipment.

Application Highlights: Traditional coatings must cure for at least 15 minutes to mitigate immediate tracking by some paving equipment. However, thanks to the unique trackless properties engineered into eTac HB, work on the Circuit of the Americas track could proceed without stopping — and without any tracking whatsoever. As a result, most of the work was completed very quickly in the last few weeks of January (around 10 working days), although rain pushed final completion of the project to early March.

As always, Ergon A&E conducted extensive quality testing in our nearby Manor lab to ensure that the maximum performance and adhesion properties of eTac HB were available throughout every inch of the Circuit of the Americas' storied track. In the end, the project took 3,169 gallons of eTac HB, applied at an application rate of .11 to .12 gallons per square yard at 330° to 350°F. The hot mix asphalt surface required 440 liquid tons of PG 82-22 binder.

"It's always rewarding when we team up with Lone Star Paving," Phillip said. "Through this synergy, we have helped to ensure a high-quality mix and construction process to uphold the high standards set by Circuit of the Americas and the racing industry."