

CALIFORNIA BEARING RATIO (CBR) LABORATORY TESTING | STRUCTURAL SURFACE STRENGTH

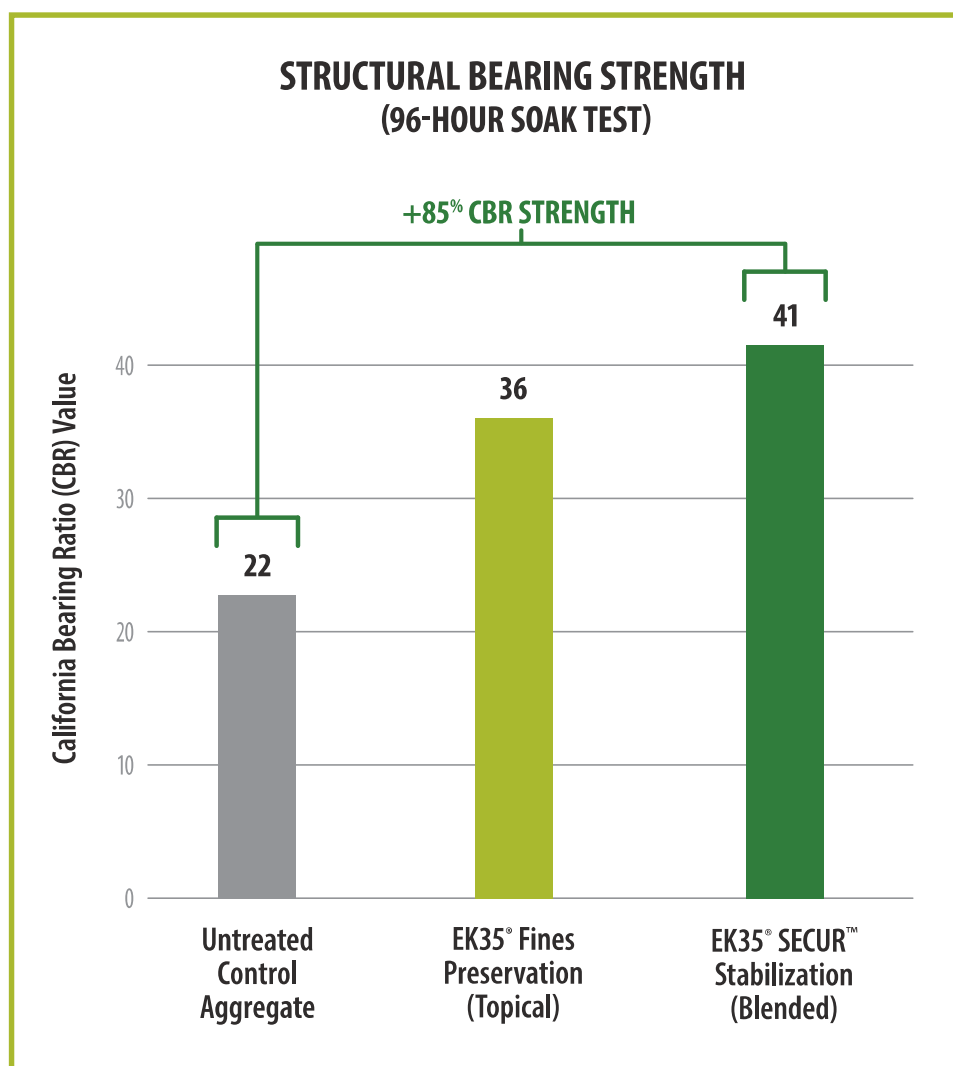
CONDUCTED IN ACCORDANCE WITH ASTM D1883 STANDARD TEST METHODS

TEST SUMMARY

The California Bearing Ratio (CBR) test is the global civil engineering standard for evaluating the mechanical strength and load-bearing capacity of highway and runway subgrade soils and base courses. In this evaluation, aggregate specimens treated with both EK35[®] Fines Preservation (topical) and SECUR[™] Stabilization (blended) were compared directly against untreated aggregate and aggregate treated with traditional dust palliatives. To simulate worst-case seasonal flooding and subgrade saturation, all specimens were subjected to a punishing 96-hour water submersion (soak test) before testing was conducted.

RESULTS CONFIRMED

- **Dramatic Strength Gains:** After a standard 30-day maturation period, the aggregate treated with the EK35[®] SECUR[™] blended system achieved a CBR value of 41, representing an 85% increase in structural bearing strength over the untreated control aggregate.
- **Topical Reinforcement:** The aggregate treated with the EK35[®] Fines Preservation topical system achieved a CBR value of 36, a 56% increase in strength over the control.
- **Saturated Stability:** While conventional, water-soluble dust control products experienced severe structural softening and chemical leaching during the 96-hour soak test, the EK35[®] specimens retained their high load-bearing capacity, proving that the hydrophobic binder matrix prevents water-induced weakening.



Structural Bearing Strength. ASTM-standard laboratory testing proves the EK35[®] SECUR[™] blended system achieves an 85% increase in load-bearing capacity even after a punishing 96-hour water submersion.