

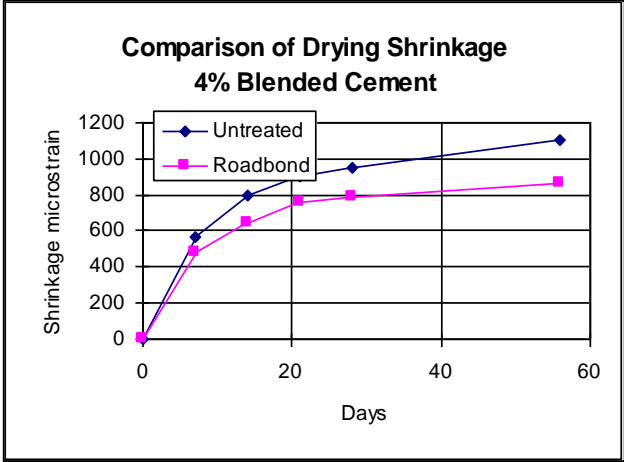
# REDUCE BLOCK CRACKS WITH ROADBOND EN 1

Roadbond EN 1 enhances the effectiveness of Portland cement so that the design strength can be achieved using 40% to 50% less conventional stabilizer. The benefits are:

- Reduced block cracks
- Lowered construction cost
- Reduced Portland cement particulate released into the air during construction
- Increased construction efficiency

Department of Transport South Australia

The graph to the right is compiled using data obtained from lab tests conducted by the Department of Transport South Australia. Block cracks were evaluated on 4% Portland cement with and without Roadbond EN 1. Material with cement alone and no Roadbond EN 1 had 42% more block cracks!



Pebble Creek Subdivision  
College Station, TX

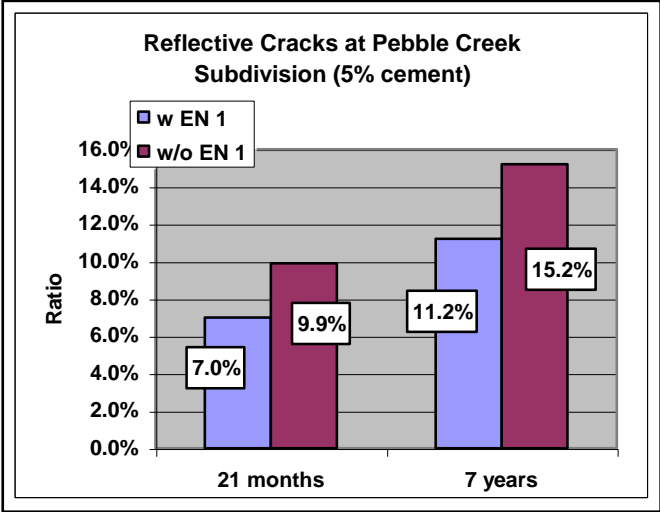
Field tests confirmed what was observed in the lab. The streets of Pebble Creek were built in May 1997.

The trial site is 800 Coral Ridge, a cul-de-sac off of St. Andrews Street and is 11,986 SF. Roadbond EN 1 and 21 pounds of Portland cement (5%) was mixed into the base material, compacted and shaped to grade, then paved with an asphalt overlay.

The control section is 700 Coral Ridge, which is the cul-

de-sac across St. Andrews from the trial section and is 11,356 SF. The construction method and Portland cement rates (5%) were the same as the trial section with the only change being that water was used instead of the Roadbond EN 1 solution to process the material.

The block cracks were measured and compared at 21 months and again after 7 years. The graph illustrates the effectiveness of Roadbond EN 1 in reducing block cracks in Portland cement-stabilized material.

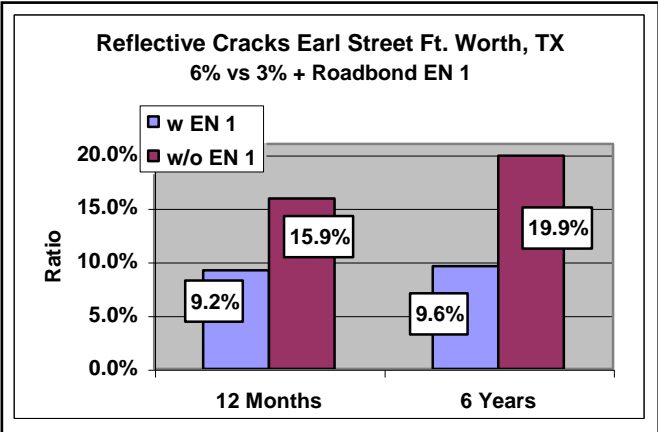


# REDUCE BLOCK CRACKS WITH ROADBOND EN 1

City of Ft. Worth  
Earl Street



In 1998, the City of Ft. Worth used 6% Portland cement and compared that to Roadbond EN 1 and 3% Portland cement. Earl Street was divided in half and a fire hydrant on the south side of the street is the demarcation line. Both sections consist of 16,473 square feet with an asphalt overlay.



The graph illustrates the reduction in block cracks resulting from the Roadbond EN 1 at 12 months and 6 years after construction. After 6 years the section without Roadbond EN 1 had more than twice as many block cracks!

The photos below clearly contrast the difference between the full rates of Portland cement and ½ rates of Portland cement and Roadbond EN 1.



City of Abilene  
5<sup>th</sup> Street

The City of Abilene reclaimed 5<sup>th</sup> St. in July 2003 using 3% Portland cement and Roadbond EN 1. The 38,475 SF project had a 0.25% block crack ratio 13 months after construction.