

# TRACTION SEAL™

## Spray Applied Composite Road Surface

### A Dry Weld™ Asphalt=Rubber=Stone Matrix

#### INVESTMENT

A single, once every three to seven year application of the appropriate Traction Seal Composite Road Surfacing provides: measurably interrupts asphalt embrittlement and the pavement condition index (PCI) remains stable at an annual cost per square foot of just over \$0.01! Improved system performance at or below the same price means, pavement maintenance budgets can be substantially extended and/or reduced over any known existing surfacing technology.

#### SAFER & MORE DURABLE

Traction Seal Composite Road Surfacing: 1) fills fissure and cracks with a highly elastomeric rubber more effectively than chip seal; 2) locks down the fines-mastic matrix surrounding the uppermost stone better than either chip seal or a conventional slurry; 3) reflexibilizes (rejuvenates) the uppermost ageing asphalt element; 4) restores micro-texture to the driving surface with increased skid coefficient; 5) provides a sun and water resistant, new, black surface which outlasts the original asphalt's color retention and water resistance; 6) utilizes scrap tires and 7) is absolutely, 100% environmentally 'clean'.

#### IMPROVED STORAGE & APPLICATION

Traction Seal Composite Road Surfacing may be compounded as an atomized slurry (-150 stone), seal coat slurry (-30 stone) or Type I slurry (-14 stone). It may be spray or squeegee applied through conventional equipment. The atomized slurry version may be heated and diluted up to 100% for quick-open-to-traffic conditions. The composite gel concentrate is extremely separation stable and may be stored for long intervals without any need of stirring, except just prior to use, whereupon it is appropriately diluted.

#### MARKET & USER FRIENDLY

Traction Seal Composite Road Surfacing dries quickly, exhibits excellent early water and scuff resistance, will not track in high temperature, retains its fresh performance even as partially used inventory for road maintenance departments, is nearly odorless and the dried residue is non-hazardous allowing for municipal landfill disposal.

#### PROVEN PERFORMANCE

Traction Seal Composite Road Surfacing is the innovative end product of over eighteen years of continuous, intensive development by a team of Lockheed Martin aerospace; scientist(s), chemical engineer(s) and field technician(s) backed up by expert contractors and manufacturing. Ever improved iterations have been commercially applied since 1998 on major highways, airports and parking lot surfaces. Estimate of worldwide installation over the last 12 years now exceeds 100 million gallons.

# TRACTION SEAL™

Spray Applied Composite Road Surface  
A Dry Weld™ Asphalt=Rubber=Stone Matrix

Traction Seal™

	Service Life in Years	Rate (gal/yd <sup>2</sup> )	Approx Material Cost (\$/gal)	Dilution	Installed Cost* (\$/Lane-mi./Yr)
Atomized Slurry	3	0.10	2.00	100%	\$704 ← Equal to ~ \$0.01/ft <sup>2</sup> /Yr !!
Seal Coat Slurry	5	0.25	1.25	50%	\$1056
Type I Slurry	7	0.70	1.60	20%	\$2640

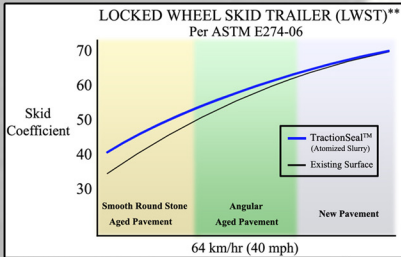
\* Installation cost is assumed to be 2x material cost.

## Example Calculation on Atomized Slurry:

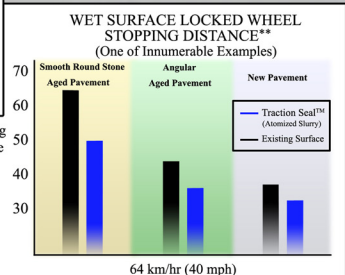
$$C_M + C_I = C_M + 2(C_M) = \left[ \frac{\left[ \frac{\$2.00}{\text{gal.}} \right]}{(1 + 100\%)} \times \left[ 0.10 \frac{\text{gal.}}{\text{yd}^2} \right] \times \left[ 63360 \frac{\text{ft}^2}{\text{Lane-mi}} \right] \right] + 2(C_M)$$

$$\left[ 9 \frac{\text{ft}^2}{\text{yd}^2} \right] \times \left[ 3 \text{ yrs} \right]$$

= \$704/lane-mi./yr  
= ~ A Penny per ft<sup>2</sup>/yr



For more information please visit:  
[www.ecostarscience.com](http://www.ecostarscience.com)



\*\* Pavement friction measurements are useful in evaluating the safety of a pavement relative to other pavements in the system, but they should not be used for quantitative determination of stopping distance. (NCHRP Synthesis 291)