

MICRO SURFACING

Emulsified Asphalt Seal

Micro surfacing is a surface treatment designed to extend the life of asphalt pavements in good condition by providing additional skid resistance, reducing moisture intrusion, protecting from oxidation and raveling and restoring a uniform black appearance. It can also be used for rut repairs and is the most economical choice for leveling.



THE PROCESS

Micro surfacing can be applied by a continuous or truck-mounted paver. It is a carefully designed mixture of fine aggregate, asphalt emulsion, additives and water, often with a polymer added, providing optimal mixture properties. The treatment is applied in a homogenous mat which adheres firmly to the surface. Traffic can be returned to the roadway quickly, typically within one hour.

*BENEFITS

- Reduces life cycle costs of roadways by 25-45% compared to traditional resurfacing
- Reduces energy use and greenhouse gasses by more than 44% compared to hot mix asphalt placement
- Return to traffic within 1 hour
- Adds at least 6-8 years of pavement service life when applied at optimum time

*ISSUES ADDRESSED

- Friction loss
- Raveling & rutting
- Oxidation
- Uneven surface profile or color

MATERIALS USED

- Aggregate: Crushed stone such as granite, limestone, reclaimed asphalt pavement (RAP) or slag can be used. A proper gradation of the stone is required
- Asphalt Emulsion: A cationic polymer-modified emulsion
- Mineral Filler: Mineral fillers such as portland cement, hydrated lime, limestone dust and fly ash are typically used
- Water: Potable water is best
- Additives: Additives may be used to accelerate or slow the break/set times of the micro surfacing

*Reported by RoadResource.org by PPRA

