Asphalt-Aggregate Applications

SEAL COATING
Various Techniques to Achieve Maximum Life

Chip Seals
Dense-Graded Seal Coats
Sand Seals
Fog Seals
Rejuvenating Seals
Liquid Road®

The industry’s top experts for over 50 years, offering products and services from 29 strategically located terminals across Canada, coast to coast.
THE MCA ADVANTAGE

With the MCA Advantage, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes, and material selection. By developing innovative, custom-designed products that offer additional benefits such as peak performance in unique conditions, improved field performance, and greater environmental and health benefits, the MCA Advantage provides significant long-term cost savings, resulting in a lower “total cost of ownership.”

SEAL COATING

Seal coating is a broad term used to describe several types of asphalt-aggregate applications that are less than 25 mm thick and are applied to any kind of road surface, such as existing asphalt, Portland cement concrete pavement or a primed or granular base. Seals can be placed as a single lift or in multiple lifts depending on the traffic demands and the conditions of the existing surface.

CHIP SEALS

A chip seal, commonly referred to as a seal coat, is primarily made up of one-sized aggregate that can be either dirty or washed.

DENSE-GRADED SEAL COATS

A dense-graded seal coat is defined as a seal coat that uses a well-graded aggregate rolled into a high float emulsified asphalt.

SAND SEALS

A sand seal is a spray application of asphalt emulsion followed by a light covering of fine aggregate such as clean sand or screenings. Although this is a simple operation, it can be useful in correcting a number of pavement flaws.

FOG SEALS

A fog seal is a light application of asphalt emulsion to an existing paved-asphalt surface. This type of maintenance treatment is primarily employed as an impervious seal that will slow the rate of weathering in the underlying pavement.

REJUVENATING SEALS

A rejuvenating seal consists of a single application of a rejuvenating emulsion to an aged road surface in order to restore the chemical balance at the surface and at some small depth below.

LIQUID ROAD®

Liquid Road® is a high performance, fibre-reinforced asphalt emulsion blended with polymers, mineral aggregates, and special surfactants to create superior adhesion, flexibility, and durability in the pavement surface. The product can be used as a seal for oxidized and aged pavement or for a newly-placed chip seal.

FEATURES AND BENEFITS

- Emulsions can be used with damp aggregate, which is preferred
- The process does not require elevated temperatures, making it environmentally friendly
- The use of emulsions significantly reduces the VOC emissions typically associated with the use of cutback asphalts
- Custom formulas can be created for existing environmental conditions and can incorporate available aggregates
- Polymer-modified emulsions can be used to enhance the asphalt’s durability, stability, impermeability, and early stone retention as well as to reduce flushing and bleeding
- Renews weathered pavements
- Available in various textures: improved skid resistance
- Fine aggregate treatments can improve street sweeping
- Reduces ravelling and restores a uniform cover
- Prevents the intrusion of moisture and air
- Seals very small cracks and surface voids
- Enriches and coats weathered aggregate particles at the surface
- Delineates shoulders from traffic lanes