



Seal Coats – Questions and Answers

What is a seal coat?

A protective layer of asphalt and crushed rock over pavement.

Seal-coating consists of spreading liquid asphalt, overlaying it with rock chips, packing the mixture by rolling, and sweeping away loose chips.

Crews sometimes apply a “fog coat” to new seal coats, that is, spread a thin coat of asphalt over the surface of the new seal coat to help lock chips in place.

What is a chip seal?

The same thing as a seal coat.

What is the purpose of seal-coating?

To protect pavement against weather and wear, extending the life of the roadway, and to provide a semi-rough surface for improved traction in slick conditions.

When do crews install seal coats?

Normally between June 15 and Aug. 31. Road-surface temperature must be 80 degrees and rising to allow heat to help asphalt and rock bond to the pavement.

Why do crews seal-coat new roads?

To safeguard new pavement.

Why do crews seal-coat old roads?

To preserve roadways. Seal coating is one way to help preserve routes until such time as further work can be scheduled and funded.

What do crews do to minimize loose rock after seal coats?

Sweep the road.

Contractors are required to sweep excess rocks from the road twice prior to leaving the project. They also are responsible for any additional sweeping that may be required in the ensuing months.

How do crews notify motorists of fresh seal coats?

Post road signs such as “loose rock on road” and “avoid windshield damage,” and issue public announcements.

How can drivers avoid windshield or paint damage from loose rock?

Observe posted speed reductions and increase following distance.

Windshield damage often is attributed to the seal coat, but it is frequently caused by impatient drivers going too fast, whose tires fling loose rocks indiscriminately at other drivers.

What do highway departments do when seal coats start to lose rock?

Notify motorists of the loose gravel, make repairs as weather permits and then hold contractors accountable for their work.

What causes rock chips to come loose?

Possible reasons are deficient asphalt, dirty rocks, ineffective application procedures, weather conditions, pavement-surface conditions, or a combination of these factors.

What steps do highway departments take to ensure quality seal coats?

Specify required materials and processes in the contract.

Oversee design.

Advertise the project as a warranty seal coat.

What is a warranty seal coat?

A seal coat that the contractor warranties to hold up.

When a contractor wins a warranty seal-coat contract, the contractor designs the project, with ITD providing only limited guidance. The contractor chooses its methods for completing the job and warrants its work.

Why are warranty seal coats advantageous?

Warranty seal coats place responsibility for the success of the seal coat on the contractor, helping ensure quality construction.

Highway departments do not accept a warranty seal coat until they see how well the coating performs for up to a year.

Seal coats not meeting warranty requirements by the following April are addressed per provisions of the contract.

Why doesn't a highway department catch a bad seal coat as it's happening or right after it's completed?

Because it's hard to tell until time passes.

If rock chips come loose, the contractor sweeps them off.

Sweeping the roadway a time or two usually solves the problem. If more chips come loose, crews sweep the road again.

What does a highway department do when a warranty seal coat continues to unravel?

Works with the contractor to identify the issues and devise a plan to address them in a timely manner. It is the contractor's responsibility to ensure project performance.

Why don't highway departments hire good contractors?

Under Idaho law, the Idaho Transportation Department (ITD) must accept the lowest bid of an approved contractor, that is, any contractor who provides a bond against substandard or incomplete work and against incomplete employee or subcontractor compensation.

Contractors generally perform good work.

What is a bond?

A bond is a guarantee by the contractor's insurance provider that the contractor will have the funding available to complete the project. The bond equals the full amount of the construction bid. The contractor sends the bond to the highway department along with its bid. ITD returns or releases bonds held if contractors are not low bidders.

ITD also releases the bond to successful low bidders, if and when they complete terms of the contract.

Do warranty seal coats require a bond?

Yes. ITD holds these bonds until its engineers determine that the seal coat is holding up at the end of the warranty period, which is in the spring after the seal coat has been tested through a winter.

If the seal coat is still in place and meets conditions of the contract, ITD releases the bond within its project closeout period of about 90 days after the warranty period ends. If the seal coat has failed, the agency requires repair work before releasing the bond. The 90-day closeout period allows ITD to require repairs during mid-summer, when temperatures are sufficiently warm for successful seal-coat repairs/replacements.

Why don't highway departments withhold all funding until projects are completed and approved?

Because contractors normally would not be able to pay their crews, equipment bills, and other expenses during the projects. ITD pays installments as construction progresses.

ITD staff members verify completion of reported work and ensure correct payments.

If a contractor runs into serious problems and can't complete a project, the bond enables the highway department to complete the project. The department uses the actual money, or the contractor's insurer steps in to complete the job.

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