

What Is The Purpose of Crack Sealing?

Crack sealing or crack filling depending upon how you refer to the procedure is an important step in extending the life of your asphalt. There are two common culprits in developing cracks in the asphalt.

First is base erosion. As the base settles beneath the asphalt surface and loses its integrity, cracks will form in the asphalt. It is important to seal those cracks with an appropriate crack sealant to reduce the negative effects of the cracks. If you do this within the first few years of the asphalt, you can reduce the severity of those cracks. By sealing these cracks, you will divert water to the berm of the asphalt instead of allowing the water to settle in the base which can cause more erosion.

The second harmful component is the Sun. Once a crack develops, the UV from the sun can cause more damage during the expansion of the crack. Crack filling can block out the damaging UV rays that will deteriorate the inside walls of a crack.

Cold-Applied Crack Sealants

Cold-applied crack sealants are ideal for repairing asphalt driveways, walking/bicycle pathways, parking lots with light traffic, etc.. Cold-applied crack sealants are available for repairing cracks up to one inch wide.

For cracks up to ½ inch wide, a standard pourable crack sealant works fine. When approaching cracks up to 1 inch wide, it is good idea to upgrade to a trowel grade crack filler. If you know the pavement will see more contracting and expansion than most situations, or is susceptible to heavier traffic. If you have what are called alligatored areas or sections with multiple cracks, the recommended material for this application is GatorPave which is a product applied by squeegee.

Hot-Applied Crack Sealants

Hot-applied crack sealants are available for numerous conditions and can depend upon what type of equipment you have. The two different types of equipment are direct fire machines and oil-jacketed kettles.

Most hot-applied crack sealants can be used for cracks up to about $\frac{3}{4}$ ". Beyond that, you may have to use the cold-applied trowel grade material. When using hot-pour materials, the minimum ambient and surface temperature must be 40 degrees which gives you a little more of an application window than cold-applied materials.

When using either type of crack sealant, cracks must be free from moisture, dust, and loose aggregate. Some cracks may need to be routed or cleaned out with a wire brush. Also using either type of crack sealant, it is usually a good idea to follow the application with a U-shaped or V-shaped squeegee to help ensure a good seal to prevent moisture from further penetrating the cracks.