

# Why Seal Coating is so Important

A good asphalt pavement seldom wears out. It is destroyed by external factors. As soon as the freshly laid hot mix pavement begins to cool, so also begins the aging process which will eventually rob the pavement of its life. The oxygen in the air and water which constantly bathe the pavement start to combine with the asphaltic binder of the pavement and a chemical change takes place. At first the process is necessary for the pavement to become hard and firm. Later, if the process is not arrested, a complete deterioration of the asphaltic binder will take place and reduce the pavement to a layer of loose stone. There is seldom an occasion where this happens because the pavement is needed and so is patched and repaired before it has completely deteriorated.

The rate of destruction is dependent on a number of things. Heat and sunlight accelerate the process and salt will act as a catalyst. Water which penetrates the surface can get into the base course to cause trouble and at the same time start oxidizing the asphaltic binder inside the pavement. A more dense mix will not oxidize as rapidly as course, open pavement. A thicker lift of pavement will keep its life longer than a thin one.

These are primarily the physical factors which affect the pavement deterioration. When we introduce the automobile and truck to the paved area, then the danger of gasoline and oil spillage becomes present. In cold climates there is an additional danger of water being caught in the pavement and freezing. This can break individual pieces of aggregate apart or it can break out large sections.

You can see the aging and deterioration of an asphalt pavement can be the result of many circumstances. Sealing the asphalt pavement with sealer after the curing period of the pavement can protect the pavement against these destructive factors. It may even cause a weak pavement to have a much longer life.

The application of a protective coating to asphalt pavements has been on a steady increase throughout the country for the past ten years. From the smallest driveway to the largest airfield, proper seal coating has been proven to be the least expensive means of maintenance. As a typical indication of its growing acceptance, two of the prominent auto manufacturers specify seal coating of parking lots for added life and improved appearance. In addition to these auto manufacturers, many major corporations, such as oil companies, restaurant chains, motels, etc, now seal coat to protect their investment.