

# 6 Steps to Highly Successful Parking Lots



## Includes:

- Asphalt
- Aggregate
- Subsurface Drainage

## Step 1: Plan Before You Pave

The anticipated size, weight, and frequency of commercial trucks are sensitive parameters in this analysis and will have a big influence on pavement thickness.

## Step 2: Dig Deep

The Pavement thickness will be heavily influenced by the strength of the onsite soil.

## Step 3: Drain the Rain

Water can be detrimental to a soil subgrade & paving materials, so drainage should be a strong consideration in the design and construction of any parking lot.

## Step 4: Build A Base

Quality materials and good compaction are essential to establish a strong working platform.

## Step 5: Pick Your Mix

Asphalt mixtures can be manufactured with different combinations of aggregates, liquid asphalt, and additives designed specifically for the desired application.

## Step 6: Pave & Save

Asphalt pavements remain the most versatile & economic pavement product and have decades of proven performance.

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Information courtesy Plantmix Asphalt Industry of Kentucky | [www.paiky.org](http://www.paiky.org)

## 1 Plan Before You Pave

Passenger cars, pickup trucks, and sport utility vehicles are relatively lightweight, and have little influence in pavement thickness. The anticipated size, weight, and frequency of commercial trucks are sensitive parameters in this analysis and will have a big influence on pavement thicknesses and mixes within the same parking lot. The cumulative effect to traffic may be expressed as Equivalent Single Axle Loads (ESALs) for the purpose of pavement design.

## 2 Dig Deep

The quality and strength of existing subgrade soil is a significant factor in the design and performance of your parking lot. Perform a geotechnical analysis and testing to establish current site conditions, which will guide site grading activities in terms of moisture content and compaction. The pavement thickness will be heavily influenced by the strength of the onsite soil.

## 3 Drain the Rain

Water can be detrimental to a soil subgrade and paving materials, so drainage should be a strong consideration in the design and construction of any parking lot. The pavement surface must be sloped to provide adequate drainage, and to avoid low areas that could lead to ponding water. A minimum combined slope of 2 percent is recommended. In contrast, porous pavements are different and are designed so water drains through the surface pavement layers, and is slowly released to the underlying ground. For more information on porous asphalt pavements, visit [www.porouspavement.net](http://www.porouspavement.net).

## 4 Build A Base

All structures need a solid foundation, and a well-prepared base will pay dividends in building a long lasting pavement structure. Quality materials and good compaction are essential to establish a strong working platform. Most projects will use a 4-8 inch layer of compacted dense-graded aggregate (DGA), which serves as an important foundation for the pavement system.

## 5 Pick Your Mix

Asphalt mixtures can be manufactured with different combinations of aggregates, liquid asphalt, Reclaimed Asphalt Pavement (RAP) and additives designed specifically for the desired application. The combination of materials that perform well in a parking lot typically are different from those used on high-traffic roadways. Long-lasting parking lot mixtures should be fine graded to prevent moisture intrusion, and should have a high liquid asphalt content for durability. Asphalt is the most recycled product in America and experts recognize that mixtures using RAP result in quality pavements.

## 6 Pave & Save

With proper base preparation and DGA placement, the asphalt mixture can be evenly placed & well compacted for optimal performance. Quality paving contractors are capable of building parking lots to meet compressed building schedules to better serve their customers. Asphalt pavements remain the most versatile and economic pavement product with decades of performance.