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PICK YOUR MIX

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





ORAIN 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 of water. A minimum combined slope of 2 percent is recommended. In contrast, porous pavements are different and are designed so that the 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.



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 soils.



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- to 8-inch layer of compacted dense-graded aggregate (DGA), which serves as an important foundation for the pavement system.

7 Keys to Highly Successful Parking Lots

Information courtesy Plantmix Asphalt Industry of Kentucky www.paiky.org

TRUCKING ALONG

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



6 THE GREEN SCENE

Asphalt is the most recycled product in America and experts recognize that mixtures using reclaimed asphalt pavement (RAP) result in quality pavements. Recycling and reusing materials saves landfill space and is environmentally responsible. Some asphalt producers also recycle asphalt roofing shingles (RAS), use warm-mix asphalt to conserve fuel and improve compaction, and producing porous asphalt mixtures that are used in porous pavements for stormwater management. On building projects with requirements for LEED, these green materials and practices may assist designers and owners in achieving certification.

PAVE AND SAVE

With proper base preparation and DGA placement, the asphalt mixture can be evenly placed and 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 and have decades of proven performance.

