



## ASPHALT FOR AIRPORTS

### QUESTIONS AND ANSWERS

*Q. Can asphalt be used to pave the runways at airports?*

A. Yes. In fact, only asphalt can provide a super-smooth, durable surface that can be maintained during off-peak hours and returned to service quickly.

*Q. At big commercial airports, is asphalt tough enough to take the punishment of heavy planes?*

A. Yes. Just ask the people who operate some of the busiest airports in the country. Some of the commercial airports with asphalt runways include Baltimore-Washington International, Lindbergh Field in San Diego, McCarran International (Las Vegas), Memphis International, Newark International, Oakland International, O'Hare International (Chicago), and San Francisco International.

*Q. Is the surface of an asphalt pavement good for landing planes?*

A. Certainly. An asphalt pavement surface can be designed and constructed to increase skid resistance, lower the risk of hydroplaning, or decrease splash and spray.

*Q. Does the contractor have to do something special so that the pavement can withstand airplane traffic?*

A. Yes, and with asphalt, it's simple. Research conducted over the past 15 to 20 years has given us the knowledge to make asphalt pavements strong enough to hold up under the pounding.

*Q. Do airports need something different from what road users need?*

A. Yes and no. Motorists want smooth, durable, safe, quiet roads – and asphalt can provide those. Airport operators also want super-smooth, durable runways that can be constructed and rehabilitated quickly, to minimize runway downtime. In that sense, the needs of both are the same. On the other hand, asphalt pavements can be customized to the exact requirements of the particular airport.

*Q. What happens when an airport shuts down a runway for maintenance?*

A. With asphalt, it may not be necessary. Just as asphalt roads can be rehabilitated during off-peak hours, so can airport runways.

*Q. How much does smoothness matter at an airport?*

A. A lot! The smoother a pavement is, the longer it will last. And, with a smoother surface, takeoffs and landings are both safer and more comfortable.

*Q. Can Perpetual Pavements be used for airport runways?*

A. The Perpetual Pavement principle – a pavement whose structure lasts indefinitely, with a surface that can be renewed at infrequent intervals – works very well for airports. The concept has already been proved at the Baltimore-Washington International Airport in Maryland and Eareckson Air Force Base in Alaska, both of which were recognized with Perpetual Pavement Awards in 2002.

*Q. Can you give examples of how HMA has been used for airport runway reconstruction?*

A. Sure! Here are a few:

- Example: Runway 4R-22L at Newark International Airport was completely reconstructed in just 10 days. The contractor placed 105,000 tons of HMA, meeting extremely aggressive paving specifications. In addition to paving, the contractor removed and replaced all runway lights and saw-cut and sealed all joints on the 9,300-foot-long, 150-foot wide runway.
- Example: In rebuilding the main runway at Eglin Air Force Base in Florida, the contractor met 100 percent of the smoothness specs.
- Example: At the Front Range Airport in Colorado, the contractor used a paver with a computerized grade control to place a 4-inch overlay, and corrected an average of 25 inches per mile of deviation to 2 inches per mile.
- Example: Two 7,500-foot-long runways at the Marine Air Corps Station, Cherry Point, North Carolina, needed paving. The Marine Air Corps asked the contractor to minimize transverse joints on the surface, so the contractor built the runways with no joints whatsoever.