A GUIDE TO FOAR PAVERON RUNWAY SEALCOATS

Sealcoating Options, the Benefits of Sealcoat, and Determining a Suitable Design Mix

Our Runway Sealcoat Offering

All FOAR Paveron products are coal tar based and therefore inherently fuel resistant. Our runway sealcoat product offering is as follows:

Paveron 3320 – This factory diluted sealcoat is ready to use and can be manually applied as is with a squeegee. *Compliance: ASTM D 3320*

Paveron 5727 – This is a standard sealcoat that must be machine applied. This product is the base component in any coal tar based sealcoat system. *Compliance: ASTM D 5727*

Paveron Plus – This product is a standard sealcoat (Paveron 5727) plus an acrylonitrile butadiene rubber (NBR) latex. This product must be machine applied and is suitable for small/repair jobs where a custom design mix is not desired.

Paveron Prime – This coal tar based primer can adhere directly to a concrete surface. Conventional sealcoat can then be applied on top of this prime coat. Conventional sealcoats cannot be directly applied to a concrete surface without Paveron Prime.

Regular Sealcoating Doubles Surface Life

All asphalt surfaces that are coated with a coal tar based sealcoat on a regular basis (two coats every three years) will benefit as follows:

1. Shielding against the drying action of the sun which causes raveling and cracking of the surface allowing for water ingress

2. Sealing against moisture accumulations within the wearing course of an asphalt surface due to inevitable hairline cracking

3. A sealed surface resists fuel and oil spills which soften, weaken, and destroy asphalt

This is why the wearing course of a sealed surface lasts 12-14 years whereas the wearing course of an unsealed surface lasts 6-7 years.

FOD Control vs. Skid Resistance

Two additional benefits that can be achieved by sealcoating depending on the design mix of a sealcoat system are as follows:

1. Foreign object debris (FOD) control – Sealcoat systems containing no aggregate cannot generate foreign object debris which can cause foreign object damage.

2. Skid resistance – Sealcoat systems that have a significant amount of aggregate will have greater skid resistance compared to a sealcoat system that does not have aggregate. Aggregate within a sealcoat system can become a source of FOD.

FOD control should be the primary objective for runways where small light aircraft operate whose jet engines are closer to the ground.

Skid resistance should be the primary objective for runways where large heavy aircraft with elevated engines operate as they are more prone to skidding during landing.

Design Mix Recommendations

Below are three design mix recommendations based upon the requirements of the end user.

Optimizing for FOD Control

Coat	Standard Sealcoat	Water	Graded Aggregate	NBR Latex	Coverage (L/SQM)
1st	100 L	30 L	NIL	1-2 L	0.60
2nd	100 L	30 L	NIL	1-2 L	0.50

Optimizing for Skid Resistance

Coat	Standard Sealcoat	Water	Graded Aggregate	NBR Latex	Coverage (L/SQM)
1st	100 L	30 L	48 kg (20 L)	4 L	0.70
2nd	100 L	30 L	48 kg (20 L)	4 L	0.60

Balancing for FOD Control and Skid Resistance

Coat	Standard Sealcoat	Water	Graded Aggregate	NBR Latex	Coverage (L/SQM)
1st	100 L	30 L	36 kg (15 L)	2-3 L	0.65
2nd	100 L	30 L	36 kg (15 L)	2-3 L	0.55

The above design mixes all contain NBR latex as it not only promotes aggregate digestion but also increases standard sealcoat durability.

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