



PEP-COAT 2010 SURFACING SYSTEM

Seals and Protects Concrete Pavements

Description

PEP-Coat 2010 Surfacing System is designed to seal and protect concrete pavements from erosion, frost damage, aircraft fuel spillage and de-icing chemicals. The system will prolong the service life of the concrete, arrest further deterioration and protect from freeze/thaw damage. It will also greatly reduce the risk of FOD from loose stones and other debris. If a high friction finish is required, suitable high PSV aggregates can be applied to the final wearing surface.

PEP-Coat 2010 Surfacing System is a uniquely formulated deep penetrating epoxy resin that is hand applied directly to prepared concrete surfaces. With an integral, fine, hard wearing surface aggregate, PEP-Coat 2010 provides an extremely robust finish that will withstand high volumes of aircraft traffic. PEP-Coat 2010 has an initial cure of 3-6 hours.

Application

- All Airfield Concrete Pavements
- Car Park Ramps and Decks

Benefits

- Extends the life of concrete pavements
- Prevents water ingress – freeze/thaw protection
- High friction finish
- Protects surface from aviation fuel spillage
- Improves skid resistance
- Reduces foreign object damage (FOD)
- Durable surface protection
- Cost-effective alternative to full depth repairs and de-icing materials
- Less disruptive than full bay replacement
- Fast cure – minimal disruption
- High performance system

Technical Specification

MIX RATIO	1:1
TENSIL STRENGTH (7 DAY CURE)	>10.5N/mrrv
ELONGATION	>30%
POT LIFE	20 mins once mixed
CURE TIME	3-6hrs
DE-ICING CHEMICALS	Resistant

Installation

WEATHER CONDITIONS

Installation should only be carried out on surfaces that are completely dry and where the surface temperature is >5°C.

PREPARATION OF THE SURFACE

The area being treated should be cleaned and dried, removing all loose material, dirt, dust and foreign matter. Captive shot blasting or other mechanical means shall be considered as a method of preparing the surface particularly if there is a build-up of dirt, coatings or other contaminants.

SYSTEM INSTALLATION PROCEDURE

The surface of the concrete is to be warmed by applying hot compressed air. The combination of the propane gas mixed with the compressed air gives off intense heat which is used to vaporise any oil, water or liquid contaminants on the surface of the concrete.

A unit of PEP-Coat 2010 Part A is added to Part B and thoroughly mixed with a suitable mechanical mixer for 3-5 minutes.

Once the materials are evenly mixed apply them immediately onto the prepared, warm, dry concrete surface using a brush, coarse roller or squeegee and ensure that the exposed area is fully covered. Work the material into the edges and the deeper voids



PEP-COAT 2010 SURFACING SYSTEM

Seals and Protects Concrete Pavements

Installation continued

taking care not to allow the material to form puddles.

As soon as the surface is fully coated with the resin, evenly broadcast the chosen aggregate onto the surface ensuring that all the wet resin is fully covered and no wet patches are showing through. The cover rate will vary and is affected by the film thickness and the condition of the host surface being treated. The cover rate will therefore vary from a minimum of 800g/m² upwards; the aggregate usage will depend on the size being used. Course-grade quartz will be applied at approximately 4kg/m² and a 1-1.2 graded aggregate will be applied at approximately 5-6kg/m².

The pot-life of mixed PEP-Coat 2010 is approximately 20 minutes so care should be taken to ensure the material is spread onto the prepared surface without delay and the chosen aggregates applied immediately.

The curing time of the applied PEP-Coat 2010 System will greatly depend on the ambient temperature but initial cure will occur within 3-6 hours. During the curing period no disturbance or trafficking should be permitted.

When the surface is fully cured and prior to opening to traffic any excess aggregate can be swept off, either by hand or using a mechanical vacuum sweeper. When attempting the first sweep it is important to ensure the surface is fully cured and the sweeper brushes do not dislodge any of the aggregate from the resin.

Once the PEP-Coat is fully cured further sweeping will be necessary until all shedding of the aggregate has taken place. The first attempt should be by vacuuming rather than by sweeping so as not to dislodge any aggregates from the resin. Further sweeping will be necessary until the initial shedding of aggregates has taken place.

If the aggregate is clean and dry it can be re-used, wet aggregate should not be used for any part of the PEP-Coat process.

Packaging and Storage

Packaging:
Part A 20kg
Part B 20kg

Shelf life for all materials is 12 months if stored in original, unopened containers at 10-25°C.

Warranty

The Company warrants that the materials meet stated specifications at the time of dispatch from the factory. Techniques used for the preparation of the repair prior to application are beyond the Company's control, as are the use and application of the materials. The Company shall not be responsible for improperly applied or misused materials. There shall be no other warranties expressed or implied.

