



Surface Dressing Information Sheet

Surface dressing is a simple and highly cost-effective method of repairing the road surface, which can prevent much higher and more expensive way to repair carriageways at a later date.

It allows ODSs Highways & Engineering Team part of Oxford City Council to maintain a high-quality road network on a limited budget.

Surface dressing involves spraying the road surface with a coating of hot liquid bitumen, known as a binder.

The coating is then covered with clean crushed stone chippings, which are rolled into the bitumen to form a water resistant, protective layer, which improves skid resistance.

Because the bitumen will not stick to the existing road surface in cold or wet conditions, the Surface dressing treatments can only be carried out in the summer months, when the weather is warmer and dry.

ODS Highways & Engineering Team, carry out pre-season patching to remove potholes and cracking. This is carried out prior to the surface dressing.

Once the pre-patching works are completed dates are set and the road notices are in place, advance warning signs are put out and letters are delivered to local residents.

The roads are mechanically swept to remove any dust or materials which might stop the binder from sticking to the surface then the appropriate traffic management signs are put in place (Loose chippings and 20mph speed limits).

A spray tanker applies the hot liquid bitumen with a controlled rate of spread. This emulsion seals the surface and provides an adhesive base for the stone chippings.

The chipping spreader then applies clean, crushed rock chippings to the bitumen binder to form a thin surface coating which gives good skid resistance. More chippings than are actually needed are applied to ensure that the entire road is properly covered. Large rollers with rubber tyres embed the chippings into the binder and begin the process of compacting the surface dressing.

The job of compacting the dressing is actually finished by the traffic using the road.

When the bitumen is set, the newly dressed bed is mechanical swept to remove loose chippings and minimise vehicle damage caused by flying stone. The road is swept again around 1 – 2 weeks later but in between the first and final sweep, road signs warn drivers to stick to 20mph to stop loose chippings damaging paintwork and windscreens.

After the last sweep a final application is sprayed over the chippings this is call lock chip, this binds the surface chipping in place.

Finally

The road markings are re-applied and the surface is fit for the next 10 years.