

Fixing our roads

We use three different methods to fix our roads:

- Full resurfacing
- Micro-asphalt
- Surface dressing

Full resurfacing

Full resurfacing, also known as plane and inlay, is when the old road surface is removed and replaced. This is used when the surface or other layers of the road have deteriorated to a point where they need to be replaced.

The process

Preparation: the old resurface is removed by a process known as 'planing', where a large machine with a rotating drum covered in teeth chews off the old surface. This process is noisy and generates quite a lot of dust, but it is fast and, in the case of night works, can usually be completed before midnight.

Sometimes only the surface layer is removed (30-40mm) but if the damage to the surface is deeper then more of the existing road will be removed in this way. The planed surface is cleaned and sprayed with asphalt, also known as bitumen, to help the new surface stick to it.

Laying: The new asphalt is laid at a high temperature and so is brought to site in insulated lorries. There it is fed into a paving machine which lays a controlled thickness of the chosen material, this is then rolled to compact it and give an even surface.



Private: Information that contains a small amount of sensitive data which is essential to communicate with an individual but doesn't require to be sent via secure methods.

Aftercare: Once the material has cooled the road can be reopened to traffic. The white lines can be replaced before the road is reopened to traffic although, for operational reasons, they are sometimes replaced as a separate operation shortly after the resurfacing. In most cases, no other special aftercare is needed.

Micro-Asphalt

Micro surfacing (also referred to as 'micro asphalt', 'micro' or 'thin surfacing') is a 'surface treatment' for roads. It is laid over the top of the existing surface to seal and protect it. It consists of a water-based mix of stones and bitumen which is spread over the existing surface by a special machine. It can take out minor dips and bumps; restores grip and texture and creates a new, waterproof surface.

The treatments allows us to carry out work on more roads, particularly in residential areas, as it is cheaper than other treatments and quick to apply. This helps to extend the life of the existing roads, meaning they will not require full resurfacing, by up to seven years.

We tend to use micro surfacing in urban areas, often on less-busy roads, where we need to seal and maintain the surface. It repairs cracks and other limited defects before the road gets into a poor condition.

The process

Pre patching: Where necessary, a patching team will repair existing pot holes and badly damaged areas of the carriageway on the days before surfacing takes place. There are a variety of methods that may be applied. Depending on size and location, this might require partial closure of the road for a short period of time (a few hours).

Stage 1: A wet mixture of bitumen and aggregate is applied over the road surface in two layers. Each layer requires approximately 20 minutes to dry before the surface is rolled and the road is suitable to be used by traffic. At this stage the surface will look un-finished with some rough textured areas and ridges. This is a normal characteristic of the process and the appearance of the surface will improve considerably with use.



Stage 2: The micro-asphalt will be left to fully bed in for approximately three to seven days following which the road will be swept of loose material. The condition of the road will continue to be monitored with further sweeping being carried out on an ad-hoc basis as required.



Stage 3: When the road has fully stabilised the white and yellow road-markings will be remarked. Any ironwork lower than the new road surface will be broken out and raised or replaced. Once the concrete bedding and surround is ready, the operatives will reinstate the surfacing with microasphalt material. These reinstatements will blend into the rest of the surface with use.



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Surface Dressing

Surface dressing is preventative work to significantly extend a road's life. It costs less than a tenth of full resurfacing and means that more money is available to invest in resurfacing where it is most needed.

Surface dressing restores skid resistance, seals the road to prevent water getting in and reduces the likelihood of potholes. It involves spraying hot bitumen on to roads, applying chippings and then rolling the road. The chippings bed down as traffic uses the road.

The Process

Stage 1 – The road is sprayed with a single or double spray of bitumen.



Stage 2 – Stone chippings are applied to the top of each layer.



Stage 3 – The chippings are then rolled to press the stones. Once the road is open, the moving traffic further embeds the chippings.



Stage 4: When the chippings have bedded in, we sweep the road two or three times to remove the excess chippings and refresh road markings if necessary. This can take up to two weeks.

Until we clear the chippings there is a 20mph speed limit on the road. This is to prevent damage to your vehicle and to maintain safety. The limit will be made clear with signage.



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