

---

## Resurfacing a 350-metre Stretch of East Hill in Dartford with Gipave's Graphene-based Asphalt

2020-07-27

An asphalt additive containing a graphene and plastic supermodifier is to be trialled on a road in north Kent.

Highways contractor [Amey](#) and its client Kent County Council are trying out Gipave, an Italian asphalt supermodifier said to extend pavement life.

The trial is taking place as part of the Association of Directors of Environment, Economy, Planning & Transport (ADEPT) Smart Places Live Labs programme funded by the Department for Transport.

The trial involves resurfacing a 350-metre stretch of East Hill in Dartford with Gipave asphalt, alongside a similar stretch with regular asphalt. Work takes place from 25th June to 2nd July. The surfaces will then be monitored.

Gipave is a polymeric supermodifier containing graphene and a selected type of hard plastic. It has been used in trials of asphalt resurfacing at many sites in [Italy](#) including a number of roads and airport runways. The first [UK](#) trial was last year, when Skanska laid a section in Curbridge, Oxfordshire.

Gipave, developed by [Iterchimica](#), is the result of a three-year research program in collaboration with Directa Plus, G.Eco and the University of Milano Bicocca. The graphene used in the new supermodifier is produced by Directa Plus, one of the world's main producer and supplier of graphene-based products. Italian tests have suggested that the use of Gipave improves service life-fatigue resistance by more than 250%.

Amey director David Ogden said: "We're always looking for new and innovative ways to provide best value for our customers and their communities, so we're delighted to be working with Iterchimica and our client, Kent County Council to trial this new product as part of our

Live Labs programme.

“Using this technology as part of our maintenance programmes could see us create more durable asphalt that could improve customer safety, the lifespan of our roads, as well as reducing impacts on journey time which brings with it many environmental and carbon reduction benefits.”

Giles Perkins, programme director for the ADEPT Live Labs initiative, said: “It’s fantastic to see our Live Labs delivering on the ground despite Covid-19. These have been very challenging times, but we’ve seen Kent and our other teams not only adapt to keep their programmes running but innovate further using the crisis as a catalyst for change.”

Iterchimica chief executive Federica Giannattasio said: “We are proud of working together with Kent County Council and Amey on this trial, which allows us to assess the effectiveness of graphene-enhanced asphalt pavements. Gipave, enhanced by G+ graphene produced by our partner Directa Plus, is an innovative technology that allows to obtain longer-lasting, high-tech, sustainable and 100% recyclable asphalt pavements. Moreover, we are confident that it will represent a technological breakthrough also for the purposes of maintenance and new construction works, generating environmental and economic benefits.”

“Starting from this year, the new manufacturing plant allows us to begin selling a product that achieves the goals set out by the Green and Circular Economy, as well as those related to the UN Sustainable Development and the Paris Climate Agreement 2015.”

Read the [original article](#) on Construction Index.