



### Application Opportunity

Broom Lane, Moorgate, Rotherham is a traditional estate road which required resurfacing due to deformation and low skid resistance. In parallel, SteelPhalt had recently concluded R&D trials incorporating a sustainable bio-binder that replaces a proportion of traditionally used bitumen. Derived from trees, it is renewable and fossil-free which helps contribute towards net zero ambitions when sourced responsibly.

SteelPhalt approached Rotherham Council to present them with the opportunity to be the first local authority to trial the installation of SteelSurf Eco+ on Broom Lane. This trial validated SteelPhalt’s first ultra-low carbon product and provided evidence that the material would perform as expected.

### Recommended Product

14mm SteelSurf Eco+, which incorporates a bio-binder replacement, was offered to resurface the road.

### Results and Benefits

120 tonnes of material were installed on Broom Lane in 2022. The material is performing to high standards as expected and the table outlines the carbon savings the local authority was able to achieve per tonne of asphalt laid. A section of the highway also included the installation of SteelSurf, allowing comparative Grip Tester

surveys to be conducted. Results demonstrate that grip is comparable with both traditional and the eco-binder options.

#### Carbon Data

| Product        | Carbon Footprint<br>Kg CO <sup>2</sup> e/<br>tonne* | Average Surface Course<br>Kg CO <sup>2</sup> e/<br>tonne* | Carbon Benefit<br>Kg CO <sup>2</sup> e/<br>tonne | Carbon Benefit % |
|----------------|---|---|--|------------------|
| SteelSurf Eco+ | 14  | 58.6  | 44.6   | 76.1%            |

\*Value based on SteelPhalt verified EPD tool

#### SCRIM Data

