



ULTICRETE

Proven performance

Heavy duty grouted asphalt

The challenge

The M25 Dartford Crossing Stack Area is used to hold heavy good vehicles (HGVs) transporting hazardous materials or abnormal loads above a certain size or weight. Vehicles are parked until they can be safely escorted through the tunnel when it is periodically closed to other road users. The frequent high volumes of heavy vehicles that use the site had led to very severe rutting and deformation in the surface. A new durable, high resistance surface was required that would break the cycle of repeated failure and repair and avoid future maintenance costs and site closures. It was essential that resurfacing work was carried out quickly to maintain the safety critical stacking service and avoid disruption to traffic on the M25 from queuing of HGV traffic using the alternative stack area.

Our solution

Tarmac's ULTICRETE, a BBA accredited heavy duty grouted asphalt was proposed as a solution. It offers outstanding resistance to cracking and deformation and is proven to deliver lasting performance in challenging environments used by heavy goods vehicles. ULTICRETE is installed as an open graded asphalt receiving course, laid with a conventional paving machine, which is then filled with a specialist free-flowing, non-shrink grout. It offers comparable resistance to concrete but it can be installed faster, doesn't require expansion joints and can be trafficked after just 48 hours, far quicker than a traditional concrete. Using ULTICRETE would minimise site closure and offer a speedy return to service for this critical site, minimising disruption to the hauliers that use it on a daily basis. ULTICRETE also offers enhanced chemical resistance compared to conventional asphalts, helping to avoid damage from chemicals like diesel, petrol and de-icers and thereby extend pavement life.

Results and benefits

ULTICRETE was installed quickly, with works completed in just three days, delivering a 25% reduction on the original programme time. As a result, the stack area was reopened on schedule for vehicles, avoiding loss of this safety-critical service or extended disruption to motorway traffic. ULTICRETE provided an excellent solution for this site, delivering many of the advantages of an asphalt in terms of fast paving times and an even, joint free surface, but with a far higher resistance to cracking, deformation and damage from fuel or other chemicals. Having been proven elsewhere in challenging environments including container ports and aircraft standing areas, the client was confident that it would deliver excellent long-term performance on this site, minimising future site closures and delivering excellent return on investment in terms of whole life costs.



Building our future