

Rubber Modified Asphalt

Proven performance

Rubber Modified, Low Temperature Asphalt resurfacing in Bolton

The first Rubber Modified Asphalt laid in the North West

The Challenge

The client, Bolton Council needed to resurface Seymour Road, a residential street in the Astley Bridge area of Bolton. Work needed to be completed in a single day to minimise disruption for road users and residents. The client was keen to explore new and innovative ways of reducing the carbon footprint of this scheme in line with their 'net-zero carbon' by 2030 pledge. After collaborative discussions on alternative materials with Tarmac Contracting, a decision was made to use Tarmac's Rubber Modified Asphalt (RMA) which would be supplied from Tarmac's state of the art RMA enabled asphalt plant at Agecroft.

Our solution

Rubber Modified Asphalts incorporate recycled rubber from old tyres and is only available in as a warm mix option, enhancing the materials sustainability benefits. It would be the first time that this innovative asphalt had been used in the North West of England by Tarmac national contracting. In addition to a typical carbon saving of 8%, the recycled rubber crumb used in the mix helps to divert old tyres from landfill. Rubber Modified Asphalt offers the potential to recycle about 500 tyres per kilometre of road, depending on layer thickness. As planned, 2484m² of the existing carriageway was planned out to a depth of 35mm and 200 tonnes of 10mm SMA Rubber Modified asphalt was installed. The rapid cooling and early trafficking characteristics of the warm mix material meant that the road was resurfaced and reopened quickly, minimising disruption to local residents.

Results and Benefits

Choosing a Rubber Modified, Warm Mix SMA on this scheme helped Bolton Council to take steps towards meeting their 'net-zero carbon' by 2030 pledge. As well as achieving an 9% reduction in carbon emissions due to the warm mix binder technology, using this material avoided sending around 200 tyres to landfill, roughly one tyre per tonne of asphalt. The Rubber Modified Asphalt SMA is a direct alternative to a conventional 50 pen SMA and delivers the same performance and surface characteristics in terms of regularity and texture, but with enhanced crack resisting properties compared with asphalt made with a standard paving grade bitumen. The material is ideally suited to local authority roads and complies with local authority clause 942 texture requirements, typically achieving 1.2-1.3mm texture depths. Work was completed on time with minimal disruption experienced by residents. The client and local residents were happy with the excellent finish and friendly, professional workmanship.



Building  our future