Getting roads right first time

Howard Robinson, chief executive of the Road Surface Treatments Association (RSTA), discusses the organisation’s partnership with the Association of Directors for Economy, Environment, Planning and Transportation (ADEPT)

In the current climate of fiscal austerity the need for councils’ to make savings inevitably places more emphasis on the need to make the right decisions regarding road maintenance, particularly as roads represent every council’s biggest asset. However, this has become more challenging over the past 10 years or so as councils’ have outsourced road maintenance to the point where few authorities now employ experienced road material engineers. The materials supply side have also made drastic reductions in technical staff levels over the same period so at a time when getting best value from a shrinking public purse is paramount we have an ever diminishing pool of experienced technical people who are best qualified to make the right decisions.

Recognising this growing problem, the Road Surface Treatments Association (RSTA) and the Association of Directors for Economy, Environment, Planning and Transportation (ADEPT) decided three years ago to work together to produce a series of new codes of practice covering a wide range of surface treatments to strengthen authorities knowledge and capabilities aimed at making the right choices on which technique to use and how to get the job done right first time. This working relationship has culminated in the publication of nine new industry guidance documents with several more in the pipeline. The process of getting each new code published has taken about a year on average. It initially involves RSTA members drafting each individual document so they start from a position of being written by industry experts and practitioners. These are then discussed with the ADEPT Soils Materials Design and Specification Group (SMDS) who then undertake a rigorous peer review of each document followed by a period of interchange of views and comments until it is eventually signed off and endorsed by ADEPT. This endorsement is critical to ensure the codes are technically accurate, generic in nature thus avoiding commercial bias and written in a style which authorities will understand and regard as credible and authoritative.

The current series of publications covers a variety of topics. New codes under development and expected to be published within the next 12 months include: fine milling, asphalt preservation, patching systems and patching products.

Asset management

In addition to these new codes, RSTA and ADEPT were also aware of the growing importance of asset management as a discipline within authorities and wanted to provide some guidance on the service life of road surface treatments. Without this crucial guidance it is difficult for asset managers to know how to work out the depreciated replacement cost of road surfacing and to attain best whole life value. So in May 2011 RSTA and ADEPT jointly published new guidance entitled ‘The service life of surface treatments’ that is available on the RSTA website. This guidance discusses the average service life of surface dressings, slurry surfacing and high friction surfacing underpinning the numbers with considerable caveats that can have a bearing on the service life. For high friction surfacing (HFS), the document recognises that there are two types, hot applied and cold applied systems. Although both are classed as type one systems under the HAPAS scheme (Highway Authorities Product Approval Scheme) many authorities hold the view that cold applied HFS systems are more durable than hot applied systems (e.g. eight years life on average for cold systems versus four years life for hot applied). Cold applied systems are more akin to a surface dressing with the binder forming a strong glue like chemical bond with the substrate and shielded from traffic by the calcined bauxite aggregate. Hot applied systems are all in mixtures. For example: the binder is mixed in a kettle at high temperatures with calcined bauxite and the resultant mixture is reliant on forming a thermal bond with the substrate. Despite this perceived difference in durability both types of systems have their place in the asset manager’s toolbox.

The code of practice for high friction surfacing published by RSTA and ADEPT in 2011 contains lots of valuable information for authorities and contractors aimed at getting the job done right first time and also provides a framework for the authority to ask for a five year guarantee.

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