



Nu-Phalt in Association with the British Board of Agrément

In 2007, Nu-Phalt made the bold decision to have the entire Infrared Road Repair System process rigorously and impartially assessed by an independent approval body. The [British Board of Agrément](#) (BBA) was the logical choice to undertake the assessment.

Background

The BBA is the UK's major approval body for new construction products and installers. BBA's Agrément Certificates are recognised by specifiers and other industry decision-makers as proof that the products covered by them have been assessed and will allow compliance with Building Regulations to be achieved.

The BBA's Agrément Certificates have been providing authoritative and independent information on the performance of building products for over 40 years. Every Agrément Certificate contains important data on durability, installation and compliance with Building Regulations in England and Wales Scotland and Northern Ireland.

Assessment involves three distinct areas - laboratory testing (carried out wherever possible to UKAS requirements), site inspections, undertaken by the BBA's own Inspection Services team, and factory production control where appropriate.

An Agrément Certificate is awarded to a product by the BBA only after it has successfully passed a comprehensive assessment involving laboratory testing, on-site evaluations and product conformity.

The Highway Authorities Product Approval Scheme (HAPAS)

The [Highways Authorities Product Approval Scheme](#) (HAPAS) was set up by the Highways Agency, CSS (County Surveyors' Society) and the British Board of Agrément in 1995, with the objective of developing national approval arrangements for innovative products, materials and systems for use in highways and related areas. This removed the need for individual authorities to carry out their own assessments and tests.

The scheme is also supported by the Scottish Executive Development Department, the National Assembly of Wales, the Department for Regional Development in Northern Ireland, CSS and TAG (Local Government Technical Advisers Group). It is also aided by TRL, other specialist laboratories, trade and professional bodies and industry experts.

The BBA's approval process for HAPAS involves laboratory and witness testing, site inspection and evaluation of the source of production of the material under assessment. Existing test or performance information is also investigated.

Data generated from these key elements is then considered by the BBA's HAPAS Project Managers/Assessors in the context of the requirements set out in the Guideline. If the data is acceptable, the HAPAS Certificate is drafted. The draft Certificate is then circulated to members of HiTAC for their comments and observations. Comments are considered by the BBA and the Certificate is then formally issued.

The BBA's interest in the product does not end with the award of its Certificate since surveillance visits are normally conducted twice yearly to ensure that the specification of the product is being maintained. At the end of each five-year period a formal Review process is undertaken to confirm that the original assessment remains valid and the product's performance is satisfactory. Therefore, specifiers can be sure that the product covered by the HAPAS Certificate will perform as set out in the document for as long as the Certificate is valid.

The BBA's HAPAS Certificates are called up where appropriate in the Specification for Highways Works. They provide an independent opinion of the product's performance, enabling highway engineers to specify innovative products in the knowledge that they have been thoroughly evaluated.

Previous Trial Progress

Following on from initial meetings with the BBA, a series of witnessed site inspections for Hot Rolled Asphalt and Surface Dressing were arranged in April 2007 and March 2008. The latter inspection visits were commissioned in order to combine the witnessed installation process alongside the testing element of the assessment.

The intention was for BBA to witness Nu-Phalt complete repairs on various road surfaces using our proposed method statements. At the same time Nu-Phalt appointed Jacobs to independently test the completed road repairs against a comparison with the properties of the untreated road surface.

[Jacobs](#) is recognised nationally as one of the UK's leading providers of materials testing and consultancy services with a network of eight UKAS-accredited laboratories and highly experienced engineers who are widely recognised as experts in their field. Jacobs' modern, fully equipped, laboratories are at the forefront of materials sampling and testing to both British and European standards and are able to deliver laboratory testing services for a wide range of materials including soils, concrete, aggregates and bituminous materials.

Following the witnessed trials core sample were taken by Jacobs of repaired and untreated road surfaces. In May 2008 Nu-Phalt received 2 No. comprehensive laboratory reports from Jacobs for HRA and SD road surface repairs which concentrated on wheel track rates, stiffness modulus, torque bond tests, skid resistance and measurement of surface texture depth.

Bases on Jacob's reports and its own witnessed site inspections, BBA issued an Agrément Assessment report in June 2008. In summary the report confirmed that in all test results Nu-Phalt repairs had achieved the required standards and that the witnessing of the repairs indicates that the system is effective in repairing in-situ defects commonly associated with asphalt products.

Based on the findings of the assessment BBA concluded that following an additional witnessed installation trial (see Current Trial Progress) it is of the opinion that the Nu-Phalt system could be used to repair defects associated with hot-rolled asphalt surface courses and surface dressing type materials and should consider including incorporating assessment work to approve the repair system on stone mastic asphalt / thin surfacing type materials for which the Nu-Phalt repair system is eminently suitable.

Current Trial Progress

Nu-Phalt recently successfully completed the final exhaustive witnessed site inspections with BBA to conclude that all corrective actions had been completed from earlier inspections.