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DURABILITY OF THIN SURFACINGS IN THE UNITED KINGDOM

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ABSTRACT

The first thin surfacing system was introduced into the United Kingdom from France in 1991 with others quickly following, whilst surfacing with stone mastic asphalt was introduced from Germany in 1995. The Highways Agency accepted the use of the first two proprietary systems on English trunk roads following road trials monitored by TRL. Thereafter, other systems had to demonstrate equivalent performance to gain similar approval. Advantages such as ease of laying and noise reduction have meant that they have rapidly grown in use to become the most common surfacing laid in many parts of the country. The HA approval system was based on two-year monitored road trials, so the short- to medium-term durability of each of these products has been demonstrated. The paper reviews the data used to assess the medium-term durability of the 22 thin asphalt surfacing systems currently approved by the Highways Agency on a total of 76 sites. The data reviewed includes the initial and two-year retained texture and the skid-resistance for all systems together with other information, such as the wheel-tracking rate and the fatigue characteristics, on those systems for which the properties were measured.

KEY WORDS: Asphalt, Thin surfacings, Materials approvals, Durability, Texture depth, Skid resistance