

Ultra-thin Asphalt; a Safer Sustainable Surfacing Treatment

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Textured ultra-thin asphalt (UTA) was developed in response to the need for a low cost thin surfacing solution to apply polish resistant aggregates onto situations where chipseals were not surviving due to traffic and microclimatic stresses.

Increasing loading allowances and engine power to tow the loads has increased the shear forces that surfacings have to withstand on the New Zealand State Highway Network's steep gradients, short radius bends and intersections to such an extent that chipseals are failing due to chip rollover in the heat of summer and ravelling in the cold of winter.

A tightly controlled aggregate gradation using high quality polish resistant aggregate is blended with specially modified binders to create a textured mix capable of withstanding all but the most extreme traffic environments. The first sites were laid in 2000 with millions of square metres constructed since, with all providing a polish resistant textured surface throughout New Zealand from motorways to intersections.

This paper is an update on the performance of UTA with some achieved lives for the many traffic and stress environments where it has been used.