

ECOSTAB⁷

STABILIZING ASPHALT SUPPLEMENT



Common deformation
of pavement



Lifecycle of a road pavement depends on the quality of bitumen. Good quality of bitumen is supposed to provide enhanced durability, plasticity, resistance to movements, good adhesive properties, and resistance to water. In the current economic turmoil, the majority of road construction companies are eager to maintain their operation cost at the lowest level by any means. Obviously, under such circumstances, the quality is not prioritized and bitumen being purchased at the “good enough” consideration and the lowest possible price. So, this situation leads to the usage of cheap, low quality bitumens which trigger fast deterioration of pavements. The possession of the portfolio of various supplements which can improve bitumen quality with little or no additional cost may resolve this quality issue.

EcoStab-7 is one of such innovations in the class of stabilizing asphalt supplements, produced by EcoCity Group Company. Mineral fibers are a main component of this supplement. Fibers absorb bitumen and prevent excessive leakage of bitumen from the mixture during transportation and pavement. Visual appearance of asphalt with EcoStab is very attractive and highly esthetic. Even after a prolonged usage, it looks like a black evenly colored surface without calcification stains. Technologically, EcoStab-7 contains “fluffy fibers” which is belonging to the so-called Basalt Fiber Polymer technology. Numerous studies have shown that roads which were paved with mixes supplemented by EcoStab-7 are in a good working condition even after 5 years of usage.

Fluffy basalt fibers (in contrary to cellulose ones) have very high physical and chemical inertness and therefore, are extremely resistant to heat (700°C) and moist deterioration. Mixes prepared with EcoStab do not require additional protection by other additives or increased bitumen content. Therefore, asphalts supplemented by EcoStab have increased content of granular material. Such asphalts have a few fold increases in a lifetime. The implementation of EcoStab-7 does not require any special or modified equipment. EcoStab-7 is simply added to bitumen during preparation.



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Therefore, the implementation of EcoStab composition into asphalt preparation triggers a chain of economical benefits:

- High level of steadiness against displacement under the influence of short-term variable loading.
- Significantly reduced bump formation and rutting on busy highways and roads.
- Exceptional and effective noise abatement solution.
- Longevity of SMA (Stone Mastic Asphalt) due to its resistance to water in highly moist conditions.
- Very high heat resistance reduces the chances to alter supplement properties by a process error (over-heating during asphalt mix preparation).
- Usage of EcoStab-7 allows to decrease road re-construction frequency by 2.5 - 4 times. Very economic composition due to the high concentration of solid granules.

In addition, EcoStab-7 can be used to improve the quality of asphalts of A & B types. It is manufactured with mineral fibers of the highest quality adapted specifically for that supplement. No secondary or by-products are used in EcoStab. EcoStab-7 has been produced by EcoCity-Group Company, and during the last seven years it has been successfully implemented in Canada (Montréal, Toronto, Edmonton) and USA (Seattle, Cleveland, Buffalo, New-York, Boston, Vancouver) with high acknowledgements.

As climate and road conditions in above-mentioned cities are quite similar to central Russia, positive effects from the usage of EcoStab-7 in Moscow are highly plausible.

EcoStab-7 is made in Canada and delivered dry in soft big bags 750 kg.



Formation of a rut without EcoStab-7



Test results with EcoStab-7

EcoStab-7 is:

- steadiness
- longevity
- heat resistance
- low consumption
- high performance

