

The influence of nanoclay on the durability properties of asphalt mixtures for top and base layers

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Abstract. To avoid traffic congestion, due to road works, a continuous research into asphalt pavement and especially its durability is of great importance. This research focuses on improving the mechanical performance and the durability of asphalt mixtures by nanoclay modified bitumen. This promising technique of introducing nanoclays or nano particles into bitumen could offer an significant improvement on the fatigue properties and rutting performance and thus the durability of the asphalt top layer.