

QUALITY CONTROL IN THE CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT LAYERS

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ABSTRACT

In asphalt concrete mixes main structure-forming role is played by the crushed mineral aggregate. With those mixes, in the course of compaction internal friction appears between the grains forming lattice of stone aggregate, which when quickly compacted results in aggregates wedging and in some cases, leads to their crushing. When asphalt mixes prepared from coarse aggregates are compacted at high speed, the bitumen film in the contact area between the grains is squeezed and its thickness decreases. This leads to coming together and crushing of the mineral aggregates and fraction lattice because the friction force at the points of contact considerably exceeds the shearing force of the remaining parts in the mix.