THE PERFORMANCE OF ASPHALT CONCRETE WITH INCREASED RA CONTENT – LABORATORY DESIGN VS. TRIAL SECTION

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ABSTRACT
Application of increased amount of reclaimed asphalt pavement material (RA) in asphalt mixtures is a current and growing trend. Along with this approach it is necessary to find solutions in which bitumen in reclaimed asphalt will not have negative impact on properties and specially durability of the mixture. The recent years brought various solutions using either softening or rejuvenating agents, as well as special polymer modified bitumen for mixtures with RA content called "PMB RC" binders. Comparing representatives of these particular approaches if further combined e.g. with 30-50 % RA are valuable to better understand possible benefits or limits each of them can have. In this study bio-based rejuvenator and PMB RC binder were used and compared in terms of asphalt mix performance. The mixtures were applied on a trial section of a heavily trafficked trunk road. This paper covers comparison of laboratory mix design and control mixtures sampled during the paving.