THE UTILIZATION OF NATURAL RUBBER ON AC-WC LASTON MIXING

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Abstract

Rubber asphalt is a new generation in flexible pavement, which allows water to penetrate into the top layer (wearing course), this layer uses an open graded, this research uses asphalt with 60/70 penetration which is used a case study of road analysis with last volume. medium cross. This research was conducted by adding additional ingredients to the asphalt mixture. The difference in the content of rubber, namely 2%, 3%, 4%, 5% and 6% of the weight of asphalt, was used in this study to simulate the effect of rubber content on the performance of the mixture. This study aims to examine the effect of mixing natural rubber on the marshall value in the laboratory environment, with the terms and technical properties of the aggregate in the rubber asphalt mixture as determined by the general specifications of the bending rubber 201. The variation of the bitumen content used to determine KAO is 4.8. % 5,3% 5,8% 6,3% 6,8% and 7,3% and obtained the KAO value of 5,1%. The rubber content used is 2%, 3%, 4%, 5% and 6%. The results of this study indicate that the highest stability value occurs in the use of 2% rubber content of 4175.33 kg and the lowest is the 4% rubber content of 3619.14 kg. The highest flow value was the use of 6% rubber content of 6.90 mm and the lowest was the 3% rubber content of 5.69 mm.

***Keywords**: Flexible Pavement, Natural Rubber, Asphalt KAO, Medium Traffic, Highways 2018, Value Marshall.*