ABSTRACT
A COMPARISON MARSHALL CHARACTERISTICS OF MODIFICATION ASBUTON AND ASPHALT PENETRATION 60/70 IN ASPHALT CONCRETE - WEARING COURSE (AC-WC) MIXING

By

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Asphalt as a binder will be an essential material in pavement construction. Pavement in Indonesia mostly uses oil asphalt with penetration 60/70. However, the use of conventional asphalt still has drawbacks, one of them is unable to withstand the pavement traffic load excess and high temperatures. The use of Asbuton modification (Retona) is expected to overcome the disadvantages of conventional asphalt. Asphalt Retona developed through a process of distillation and extraction Asbuton to enhance the quality of the asphalt. This Laboratory research was conducted to see the characteristic of mix Asphalt Concrete Wearing Course (AC-WC) using Asbuton modification (Retona Blend 55) compared with the asphalt penetration 60/70 seen from the Marshall parameter. The results showed that the stability value of asphalt Retona Blend 55 is higher than the stability value of asphalt Penetration 60/70 and the flow values produce by Retona Blend 55 tend to be smaller. From the other side, the void in the mix (VIM) showed that asphalt Retona Blend 55 is relatively larger than the asphalt penetration 60/70. The void in mineral aggregate (VMA) showed that the value of VMA asphalt Retona Blend 55 is smaller than the asphalt penetration 60/70. Void filled with asphalt (VFA) showed that the value of VFA asphalt Retona Blend 55 is relatively smaller than the asphalt penetration 60/70. Based on the Marshall parameters, asphalt Retona Blend 55 can be repaired the asphalt penetration 60/70 in resisting heavy traffic load and high temperatures.

Key words: Asphalt Concrete-Wearing Course (AC-WC), Marshall parameter, Retona Blend 55, Asphalt Penetration 60/70.