

ABSTRACT

TEMPERATURE MIXING VARIATION ON MARSHALL PARAMETERS IN MIXED LAYER ASPHALT CONCRETE

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This study was conducted to determine the effect of temperature variations on the mixing process of the asphalt concrete AC-WC (Asphalt Concrete-Wearing Course) subtle gradations in the middle limit and lower limit of the Marshall parameters with reference to specifications of Bina Marga, 2010.

From the results of experiments conducted that the optimum asphalt content is used to middle limit using a asphalt content of 5,7% and 6,8% for the lower limit after that mixing was done using temperature variation of 120°C, 130°C, 140°C, 150°C, and 160°C.

To a mixture of Laston AC-WC subtle gradations middle limit grading 5,7% asphalt content mixing temperature using a temperature of 120°C, 130°C, 140°C, 150°C, 160°C and still meet all standards of marshall parameters. Ideal mixing temperature variations in the middle limit of mixing temperature 150°C-160°C. While the lower limit to the level of 6,8% asphalt content mixing temperatures between 120°C-160°C did not meet the specifications, because the MQ value below the minimum value of 250 kg / mm.

*Keywords: Mixing Temperature, 2010 Specification, Marshall,
Asphalt Concrete-Wearing Course (AC-WC) Subtle Gradation.*