TLT-306 (92)

RETAINED STABILITIES

1.0 SCOPE

1.1 This method compares the Marshall stability values of 35 minute soaked specimens with the stability values of specimens soaked for 24 hours.

1.2 The retained stability is obtained by comparing the Marshall stability values at the estimated design asphalt content used for the 24 hour soak specimens to the Marshall stability determined from the plot of the 35 minute soak specimens at that same asphalt content.

If the estimated design asphalt content is significantly different from the recommended design asphalt content a new set of 24-hour soak specimens will be formed and tested.

1.3 A mix design with a retained stability below 70% indicates a high clay or coal content or other deleterious materials in the aggregate.

2.0 APPLICABLE DOCUMENTS

2.1 ASTM D1075 Standard Test Method for Effects of Water on Cohesion of Compacted Bituminous Mixtures

2.2 TLT-301 Mix Design Method for Asphalt Concrete Pavement

3.0 CALCULATION

3.1 Retained Stability (%) =

$$\frac{Marshall\ \ stability\ after\ 24\ hour\ \ soak}{Marshall\ \ stability\ after\ 35\ minute\ soak} \ x\,100$$

4.0 REPORT

4.1 The results are presented within the mix design summary report.