

EFFECT OF OVEN HEATING TIME OF ASPHALTIC CONCRETE  
ON MARSHALL STABILITY

Objective

It has been observed in the Laboratory that an increase in oven heating time of relatively short duration between mixing and compaction of asphaltic concrete hot mixes can have an effect on the Marshall stability results obtained. The purpose of this short investigation is to determine the effect of oven heating time on the density and stability of hot mixes.

Materials

A total of seven hot mixes with various aggregates, gradations and asphalt contents were made and tested. All of the mixes were proportioned and mixed in the Laboratory from aggregates that were in excess of the trial mix requirements. The proportions, and consequently the gradations, were the same as those used in the trial mixes shown in the tabulation by their ASD numbers. Each mix was made from different aggregates and gradations, and each contained the recommended asphalt content. A variety of asphalt sources was used.