



**WORKSHEET FOR DETERMINING VOLUMETRIC
PROPERTIES OF SUPERPAVE ASPHALT CONCRETE at N_{des}
AASHTO T 209, AASHTO T 166, AASHTO T 269 AND AASHTO R 35**

Project Source
 Sample of Lot No. Sample No.
 Where sampled Time Sampled:
 Sampled by Date Tested by Date

GYRATORY COMPACTOR SAMPLE INFORMATION

English Metric
 Sample height, Number of gyrations @ N_{des}
 Initial sample weight, g Binder Content, % by mix (Pb)

MAXIMUM SPECIFIC GRAVITY (AASHTO T 209)

A. MASS OF CALIBRATED PYCNOMETER AT
 B. Mass of sample in air, g
 C. Mass of container filled with sample and water at , g
 D. Maximum Specific Gravity, Gmm, $[B/(A+B-C)]$

BULK SPECIFIC GRAVITY OF COMPACTED ASPHALT MIX (AASHTO T 166)

E. Mass of sample in air, g
 F. Mass of SSD sample, g
 G. Mass of sample in water , g
 H. Volume, cc $[F-G]$
 J. Bulk Specific Gravity, Gmb, $[E/H]$
 K. Unit mass of sample,

PERCENT AIR VOIDS OF COMPACTED ASPHALT MIX (AASHTO T 269)

L. Percent air voids, V_a , % $[100*(1-(J/D))]$

VOLUMETRIC ANALYSIS FOR COMPACTED ASPHALT MIX (AASHTO R 35)

M. Bulk specific gravity of combined aggregate, (from mix design), Gsb
 N. Percent aggregate in sample, P_s $(100-P_b)$ ⁽¹⁾
 O. Voids in the mineral aggregate, VMA, % $[100-((J*N)/M)]$
 P. Voids filled with asphalt, VFA, % $[100*((O-L)/O)]$

(1) P_b as determined by AASHTO T 308.

REMARKS: