



**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	C. Mass of container filled with sample and water at , g
B. Mass of sample in air, 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	H. Volume, cc $[F-G]$
F. Mass of SSD sample, g	J. Bulk Specific Gravity, Gmb, $[E/H]$
G. Mass of sample in water , g	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	O. Voids in the mineral aggregate, VMA, % $[100-((J*N)/M)]$
N. Percent aggregate in sample, Ps $(100-Pb)$ ⁽¹⁾	P. Voids filled with asphalt, VFA, % $[100*((O-L)/O)]$

(1) Pb as determined by AASHTO T 308.

REMARKS: