

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION
MATERIALS AND QUALITY ASSURANCE
HMA – RICE AND VOIDS WORKSHEET**

Counter No: _____	Date: _____
RI Contract No: _____	F.A.P. No: _____
Producer: _____	Location: _____
Mix No: _____	Mix Class: _____

I. Superpave Sampling Procedure

1. Sample from truck in three equal increments. (AASHTO T-168)
2. Record temperature of mix in Truck. Temp: _____ (°F)
3. Split and quarter sample for testing. (AASHTO T-248)
4. Prepare sample for Ignition Oven.

<u>NMAS</u>	3/4"	1/2"	3/8"
<u>Minimum Mass (g)</u>	2000	1500	1200
5. Prepare sample for G_{mm} (Rice) test, spread out, and cool.

<u>NMAS</u>	3/4"	1/2"	3/8"
<u>Minimum Mass (g)</u>	2500	1500	1500
6. Prepare gyratory specimen. (AASHTO T-312)
 - 4800-5000g sample (approximation, adjustments may be needed)
 - Introduce sample to **heated mold** in one continuous motion.
 - Correctly place plates and paper disks.
 - Check for compaction temperature, and compact. Temp: _____ (°F)
 - Print height results.

Puck ID: _____

II. G_{MM} Test Procedure and Calculation (Rice Test) (AASHTO T-209)

1. Submerge pycnometer in water bath until it stabilizes and record weight. B _____ (g)
 2. Tare pycnometer and place dry, cool, loose sample and record weight A _____ (g)
 3. Add water until 1" above mix. Vacuum de-aerate at 25-30 mm Hg.
 4. Agitate for 15 ± 2 minutes.
 5. Submerge pycnometer and sample in bath for 10 ± 1 minutes. Record weight. C _____ (g)
- G_{MM} Calculation*
1. Subtract weight B from C. C - B = D _____ (g)
 2. Subtract D from weight A. A - D = E _____ (g)
 3. Take weight A and divide by E. A / E _____ G_{MM}
 4. Theoretical Max density. G_{MM} x 62.4 _____ lbs/ft³
- Void Calculation*
1. Calculate G_{MB} for the Gyratory Puck (Bulk Specific Gravity) G_{MB} _____
 2. Divide G_{MB} by G_{MM} G_{MB} / G_{MM} = F _____
 3. Voids (1 - F) x 100 _____

Sampled/Tested By _____ Date _____
(Print / Sign)