

AASHTO T-312 GYRATORY SUPERPAVE COMPACTION

Preparing and Determining the Density of Bituminous Mixture Test Specimens Compacted by the Superpave Gyratory Compactor

	Trial 1	Trial 2
1) Was the Weight of the Superpave sample determined before testing? (Approx 4400-4700 grams, usually decided on during prepave conference)	_____	_____
2) Describe the reheating process for gyratory samples before compaction. (Sample probed, sample uniformly heated; once sample reaches compaction temp, proceed with compaction)	_____	_____
3) How long are molds heated before compaction? (30 minutes at compaction temp)	_____	_____

Operation of the Pine Brovold Gyratory Superpave Compactor

1) Gyratory mold removed from the oven and set on a flat surface.	_____	_____
2) Gyratory mold seated into Pine Brovold machine (Mold seated with pegs slotted into the groove)	_____	_____
3) The bottom plate was removed from the oven and placed into a mold.	_____	_____
4) The paper disk is seated into the mold, and a funnel is placed onto the mold.	_____	_____
5) The sample was removed from the oven and poured through a funnel into mold-Care taken not to segregate; the sample poured into one lift.	_____	_____
6) The sample was leveled, the paper disk seated on top, and the top plate removed from the oven and seated on top of the paper disk.	_____	_____
7) The machine was closed and secured per the manufacturer's instructions.	_____	_____
8) Desired Gyration set. Pressure (600kpa +/- 18) and angle verified (1.16 +/- 0.02 degrees internal angle)	_____	_____
9) The machine started, and the compaction process was completed.	_____	_____
10) Height recorded (115.0mm +/- 5.0)	_____	_____
11) The compacted sample was extruded from the compactor, moved to a flat surface, and allowed to cool. (After extrusion, the sample may need time to cool before moving to a flat Surface)	_____	_____
12) Paper Disks were removed, plates were removed, and asphalt was wiped clean.	_____	_____
13) Plates and mold returned to the oven for reheating. (At least 5 min in the oven at compaction temp before reusing. Recommended to use two sets of molds and plates)	_____	_____
14) Machine lubricated (as needed per manufacturer) Ram Lowered and parked in home position ready for next compaction.	_____	_____

Pass Y/N:
