

SUPERPAVE GYRATORY COMPACTION – PLANT MIX (Alberta and Yukon)

IMPORTANT NOTE: The preparation of compacted specimens is to the Design Gyration Level only. No compaction to the maximum gyration level is required.

1. PLANT SUPERPAVE SAMPLES (PSS)

Two boxes of Superpave Plant Mix for two different mixes, namely **PSS-I-N for the 19.0mm mix** and **PSS-II-N for the 12.5mm mix** have been provided

2. MAXIMUM SPECIFIC GRAVITY (G_{mm})

Determine the G_{mm} of each mix type using D2041. Report the value of each of the two replicates (i) and (ii) to three decimal places.

3. GYRATORY COMPACTION

The specimen preparation parameters for this testing are as follows:

	<u>19.0mm (PSS-I)</u>	<u>12.5mm (PSS-II)</u>
Mass of individual gyratory specimen, g	4950±40	4950±40
Recompaction temperature, °C	137	137
Initial number of gyrations, N_{ini}	7	7
Design number of gyrations, N_{des}	75	75

For each mix type, prepare two specimens to the **design number of gyrations**

4. BULK DENSITY AND % G_{mm} (Compaction Degree)

Prepare specimens, determine the bulk density of the specimens and complete all necessary calculations, **using applicable ASTM and AASHTO procedures**, to obtain % G_{mm} at N_{ini} , and the % air voids at N_{des} .

Report the values of bulk densities to three decimal places.

Report the values of % G_{mm} to one decimal place

The Gyratory Plant Mix test results shall be reported online and submitted by **2023 January 6, Friday**. An example of a completed report form is shown below. Your form will appear slightly different as testing requirements have been changed (Compaction to N_{max} has been removed).

Remember: Your lab's worksheets must be submitted through the portal with your proficiency report. Please combine all worksheets for each portal report into a single pdf prior to uploading. You are required to keep all original worksheet hard copies in a secure dedicated location such as a sealed envelope that is available to CCIL upon request. Do not courier/mail/fax/e-mail the worksheets to CCIL.

DO NOT send reports and worksheets by fax



2020 Asphalt Reporting Form Gyratory Plant Mix

Gyratory Plant Mix Report - Certification Program

▶ **CCIL Confidential Lab #** CCIL 999

▶ **Lab Name:** Demo Lab

▶ **Tested by:**

- Lab Technician
- Supervisor / Manager
- Not listed

Please specify

Super Technician

Gyratory Plant Mix Report

Test	A-PS-xxx (i)	A-PS-xxx (ii)	- Avg	B-PS-xxx (i)	B-PS-xxx (ii)	- Avg
MSG (G_{mm})	2.615	2.625	2.620	2.600	2.610	2.605
BRD @ N_{des}	2.525	2.535	2.530	2.520	2.526	2.523
BRD @ N_{max}	2.546	2.566	2.556	2.540	2.550	2.545
% G_{mm} @ N_{ini}	89.2	89.6	89.4	88.8	89.2	89.0
% G_{mm} @ N_{max}	97.4	97.8	97.6	97.7	97.7	97.7
% Air Voids (@ N_{des})	3.4	3.4	3.4	3.1	3.2	3.2

Compactor Calibration

Internal Angle (1.16 deg.)

Comments