

## 2024 CCIL Asphalt Correlation

### AB YT Superpave Gyrotory Compaction – Plant Mix (PSS) Instructions

Review your shipping address shown in the portal and update it if there are any changes through the request for services. When you receive your samples, review the shipment before signing off with the shipper.

**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)

In your shipment, you should have received 2 boxes of Superpave Plant Mix for 2 different mixes, **A-PSS-N for the 19.0mm mix** and **B-PSS-N for the 12.5mm mix**.

#### 2. MAXIMUM SPECIFIC GRAVITY ( $G_{mm}$ )

Determine the  $G_{mm}$  of each mix type using D2041 (latest revision). Report the value of each of the 2 replicates (i) and (ii) to 3 decimal places.

#### 3. GYRATORY COMPACTION

The specimen preparation parameters for this testing are as follows:

	<u>19.0mm (A-PSS)</u>	<u>12.5mm (B-PSS)</u>
Mass of individual gyratory specimen, g	4865±40	4930±40
Recompaction temperature, °C	133	144
Initial number of gyrations, $N_{ini}$	7	7
Design number of gyrations, $N_{des}$	75	75

For each mix type, prepare 2 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 the latest 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 3 decimal places.

Report the values of % $G_{mm}$  to 1 decimal place.

The Gyrotory Plant Mix test results shall be reported online and submitted by **2024 January 5, 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 correlation 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.

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### 2020 Asphalt Reporting Form Gyrotory Plant Mix

#### Gyrotory 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

#### Gyrotory Plant Mix Report

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

#### Compactor Calibration

Internal Angle (1.16 deg.)

#### Comments