



## 2025 HMA PROFICIENCY INSTRUCTIONS

This sample is for the 2025 Statewide Hot Mix Asphalt Proficiency Program. The Level 1A Certified Specialist, to whom this sample is addressed, needs to receive the sample promptly so they can proceed with testing in a timely manner. HMA Proficiency consists of **four tests**:

- Tex-236-F, Asphalt Content determination by the Ignition Method (Part I)
- Tex-227-F, Theoretical Maximum Specific Gravity (Part II)
- Tex-207-F, Bulk Specific Gravity (Part I)
- Tex-207-F, Bulk Specific Gravity (Part VI, only if applicable)
- Tex-200-F, Dry Sieve Analysis (Part I)

**IMPORTANT NOTE:** HMA Proficiency must be run independently by each Level 1A Specialist. All tests must be performed according to applicable test procedures, except as noted below. Failure to abide by these directions will obscure results and bias the proficiency ratings.

### SAMPLE:

1. **Record the Color ID (Red/Yellow/Blue) located on the exterior of the bucket.**
2. Place the bucket in an oven that has been pre-heated to **250°F**.
3. Leave the bucket in the oven for **two hours**.
4. Remove the bucket from the oven and empty the material in a large flat pan.
5. Weigh up samples using the following weights:
  - Ignition Oven: **1200 grams**
  - SGC Molded Specimen at **62.0 mm**: **2553 grams**
  - Theoretical Maximum Specific Gravity ( $G_r$ ): **1100 grams**
6. Return the samples to a **250°F** oven.
7. When the temperature is reached, begin molding SGC specimen, running  $G_r$ , and Ignition Oven Extraction:
  - Ignition Oven should be run at **500°C (932°F)** or on the default setting on NTO ovens. **Do not** apply correction factors.
  - Ensure that sieve sizes correspond to those listed in the attached worksheet. Run a dry sieve analysis **only** on the ignited sample in accordance to Tex-200-F.
  - No dry back is necessary for the  $G_r$ .
8. Hand calculate the results.

**Submit and upload test results by February 21<sup>st</sup>, 2025** at [www.txhmac.org](http://www.txhmac.org).

**Contact the HMAc at (512) 312-2099 if you have trouble logging in or submitting your results.**

Thank you,  
Michael Rung  
The University of Texas at Austin  
Phone (Office): (512) 471-4565  
E-mail: [mrung@mail.utexas.edu](mailto:mrung@mail.utexas.edu)

## 2024 HMA PROFICIENCY WORKSHEET

This worksheet will be used to hand calculate your 2025 HMA Proficiency results. Keep this worksheet until you have received the final proficiency report.

**Submit and upload results by February 21<sup>st</sup>, 2025** at [www.txhmac.org](http://www.txhmac.org).

<b>TECHNICIAN</b>
<b>CERTIFICATION NUMBER</b>
<b>DATE</b>
<b>COLOR ID (RED/YELLOW/BLUE)</b>

<b>YELLOW</b>
---------------

<b>IGNITION OVEN</b>	Weight of basket (g)	
	Weight of basket and sample (g)	
	Weight of sample (g)	
	Weight of basket and sample after burn (g)	
	<b>Calculated Asphalt Content (%)</b> <small>(Nearest 0.1%)</small>	

<b>THEORETICAL MAXIMUM SPECIFIC GRAVITY</b>	Weight of calibrated pycnometer (g)	
	Weight of sample (g)	
	Weight of pycnometer, sample, and water (g)	
	<b>Calculated G<sub>r</sub></b> <small>(Nearest 0.001)</small>	

<b>BULK SPECIFIC GRAVITY</b>	Height of specimen (mm) <small>(Nearest 0.1)</small>	
	Weight of specimen in air (g)	
	Weight of specimen in water (g)	
	SSD weight (g)	
	<b>Calculated G<sub>a</sub></b> <small>(Nearest 0.001)</small>	
	<b>Calculated % Density</b> <small>(Nearest 0.1%)</small>	

<b>SIEVE ANALYSIS</b>	Sieve Size	Individual weight retained (g)	Individual % retained <small>(Nearest 0.1%)</small>	Cumulative % retained <small>(Nearest 0.1%)</small>	<b>Total % Passing</b> <small>(Nearest 0.1%)</small>
	3/4"				
	3/8"				
	#4				
	#8				
	#30				
	#50				
	#200				
	Pan				
	Loss from sieving (g)				
Total -200 (g)					

<b>SGC INFO</b>	<input type="checkbox"/> Pine	Model #	
	<input type="checkbox"/> Troxler	Identification Number	
	<input type="checkbox"/> Interlaken	Calibration Date	
		Internal Angle	