

West Virginia Division of Highways
Asphalt Content By The Ignition Method (AASHTO T308, Test Method A)
Mix Design Calibration And Gradation Comparison Worksheet

Lab Number: _____ Material: _____ Field Sample #: _____
Technician: _____ T400 #: _____ Date: _____

Data Before Ignition	Test Temp: _____ °C	1	2	3	4
Actual Percent Asphalt Of Prepared Samples					
(A) Weight of Basket + Sample					
(B) Weight of Basket					
(C) Sample Weight (A - B)					
Data After Ignition					
(D) Weight of Basket + Aggregate					
(E) Weight of Basket					
(F) Aggregate Weight (D - E)					
(G) Asphalt Content From Oven Printout or $[(C - F) / C] \times 100$ (only when printer malfunctions)					

If the difference between the measured asphalt contents of the first two samples exceeds 0.15 percent repeat the two tests and, from the four tests, discard the high and low result. Determine calibration factor below from the remaining results.

Calibration Factor of Two Tests Determined In Accordance With Above Requirement

(H) Difference Between Actual Sample Asphalt Content and Measured Asphalt Content (G)				
(J) Average Calibration Factor of Mix Design				

If the calibration factor exceeds 1.0 percent, lower the test temperature from 538 °C to 482 ± 5 °C and repeat test. Use the calibration factor obtained at 482 °C even if it exceed 1.0 percent.

Aggregate Gradation Calibration Results

Sieve Size	Blank Agg. Sample Gradation	Ignition Oven Burn Off Aggregate Calibration Samples					
		Sample 1		Sample 2		Average Difference	Correction Factor (±)
		% Passing	Difference	% Passing	Difference		
2 in (50 mm)							
1 1/2 in (37.5 mm)							
1 in (25 mm)							
3/4 in (19 mm)							
1/2 in (12.5 mm)							
3/8 in (9.5 mm)							
No. 4 (4.75 mm)							
No. 8 (2.36 mm)							
No. 16 (1.18 mm)							
No. 30 (600 µm)							
No. 50 (300 µm)							
No. 200 (75 µm)							

For each calibration sample, subtract the % passing each sieve from the actual blank value. Indicate when the subtracted value is more than the blank sample using a negative "-" sign. Calculate the average difference of the two samples. If the average difference for any sieve is greater than the value permitted in Table-2 of AASHTO T-308, then apply the guidelines of Section 6.11 of this procedure in assigning correction factors to individual sieves.

Attach all asphalt content oven printouts and T417 calibration sample gradation results to this report.