



**WORKSHEET FOR IGNITION FURNACE BINDER CORRECTION FACTOR AND  
 AGGREGATE GRADATION CORRECTION FACTOR FOR MIXES INCLUDING RAP**

Project: \_\_\_\_\_ Date: \_\_\_\_\_

Sample No.: \_\_\_\_\_ Tested by: \_\_\_\_\_ Test Temp, (°C) \_\_\_\_\_

Target binder content, % by mass of Mix: \_\_\_\_\_ Binder content, RAP, % by mass of RAP: \_\_\_\_\_

Ignition Furnace Manufacturer: \_\_\_\_\_ Serial #: \_\_\_\_\_ Location of Furnace \_\_\_\_\_

	Trial No. 1	Trial No. 2
(A) Initial "battered" bowl mass, g		
(B) Final bowl mass <sup>1</sup> , g		
(C) Bowl mass difference, (B - A), g		
(D) Mass of RAP, g		
(E) Mass of RAP Aggregate, g (D - D*(RAP/100))		
(F) Mass of RAP Binder, g (D*(RAP/100))		
(G) Dry Virgin Aggregate mass, g		
(H) Virgin Binder mass <sup>2</sup>		
(I) Total Binder mass, (F+H), g		
(J) Corrected binder mass, (I - C), g		
(K) Actual binder content by mixture mass, (J / (D + G + H)) * 100, %		
(L) Sample basket assembly mass, g		
(M) Sample basket assembly & mix mass <sup>3</sup> , g		
(N) Mix mass <sup>4</sup> , (M - L), g		
(O) Ignition furnace binder content by mass of mix, %		
(P) Correction factor, (O - K), %	P1	P2
(Q) Average correction factor <sup>5</sup> , ((P1 + P2) / 2), %	Average	
(R) Difference in correction factor <sup>6</sup> ,  P1 - P2 , %	Difference	

<sup>1</sup> Scrape the bowl until the final mass is within ± 0.5 grams of the initial "battered" mass.  
<sup>2</sup> For guidance on determining required virgin asphalt content see the FLH Addendum to AASHTO T 308: Correction Factors for Hot Mix Asphalt (HMA) Containing Recycled Asphalt Pavement (RAP) Example 1.4.  
<sup>3</sup> After placing the basket assembly and mix into the ignition furnace verify that the displayed mass and the mass recorded in (M) agree within ± 5 grams.  
<sup>4</sup> Be certain to enter (N), the mix mass into the ignition furnace control panel prior to initiating the burn cycle.  
<sup>5</sup> If the correction-factor exceeds 1.0%, lower the test temperature to 482 °C and repeat the test. Use the correction factor at 482 °C even if it exceeds 1.0%.  
<sup>6</sup> If the difference is greater than ± 0.15 percent, run two more samples and discard the high and low test results.

**Remarks:**

