

Agency: \_\_\_\_\_

Project Number: \_\_\_\_\_

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

Project Name: \_\_\_\_\_

**MGPEC**  
**Form # 9** (11-24-2008)

• **Mixture Design Requirements for Hot Mix Asphalt Pavements (HMA)**

• Project Special Provision Sheet for Hot Mix Asphalt Pavements (HMA)

This MGPEC Form #9 is a **mandatory part of the bid documents**, and → shall be filled out by the AGENCY for each mix specified. The Contractor shall include a copy of this form with each Mix Design submittal after the contract is awarded.

**Street Classification:**

(examples: Residential, Collector, Arterial, Industrial, Parking Lot or actual name for Project)

→ Construction Application:     Top Lift     Intermediate Lift(s)     Bottom Lift  
 Patching     Other \_\_\_\_\_

→ Aggregate Gradation:     Grading SX (2.5" or less lifts)  
   Grading S (2.5+ to 3.5" lifts)  
   Grading SG (3.5" or thicker lifts) - for lower lift(s) only, may need approval of surface texture by Agency  
   SMA (Top lift only)  
  The SMA gradation for this project shall be \_\_\_\_\_

→ RAP Quantity, Maximum:     0%     15%     20%     25%

Notes:    A quality control plan for RAP will be required when RAP is used  
          Top lift Maximum RAP content allowed is 20%

→ Superpave Gyrotory Mix Design Compaction Level, Recommended usage and Recommend binder(s):

<b>Design Level</b>	<b>Recommended Traffic Levels</b>	<b>Recommended PG Binder(s)</b>
<input type="checkbox"/> N <sub>design</sub> =50	Low volume	<input type="checkbox"/> PG 58-28 or <input type="checkbox"/> PG 64-22
<input type="checkbox"/> N <sub>design</sub> =75	0 to <3 million ESALs	<input type="checkbox"/> PG 64-22 or <input type="checkbox"/> PG 58-28
<input type="checkbox"/> N <sub>design</sub> =100	3 million to <30 million ESALs	<input type="checkbox"/> PG 64-22 or <input type="checkbox"/> PG 76-28

Notes: - The binders are shown in order they should be considered.  
- PG76-28 polymer modified PG Binders are typically used in the top lift only  
- PG 58-28 Binder recommended for residential developments with less than 100,000 ESAL's

- Target Job Mix Optimum Binder Content for HMA gradings as close to 4.0% air voids as possible (3.5% to 4.5% air voids per MGPEC Item 9 October 2008)
- Target Job Mix Optimum Binder content for SMA gradings at 3.0% to 4.0% air voids

A completed MGPEC Form #9 shall supplement the MGPEC Construction Specifications defining the contract specific requirements of Item 9: Hot Mix Asphalt Pavement (HMA) & Stone Matrix Asphalt (SMA). Refer to the Item #9 Specifications for details.

MGPEC Form #9

to be used with :

MGPEC – Volume 1 - Pavement Design Standards and Construction Specifications

MGPEC Item 9 Hot Mix Asphalt Pavements (HMA) & Stone Matrix Asphalt (SMA) November 2008 version