



Who Is MGPEC

- **Established in 1993**
- **Organization of Paving Professionals**
 - Local Agency
 - State
 - Federal Highways
 - Paving Industry
 - Consultants
- **Membership**
 - 19 government agencies
 - 2 industry groups (ACPA, CAPA)
 - 42 consulting

Purpose

- **Goals**
 - Represent all local agencies in Denver Metro area
 - Improve pavement quality
 - Lower life-cycle costs
 - Improve information sharing and education
 - jurisdictional
 - industry
 - Localized pavement standards
 - design
 - construction
 - Sustainability

MGPEC Standards

- **Design and Construction**

- Removals
- Excavation
- Embankment
- Moisture Treatment
- Subgrade Stabilization
- Concrete Curbs, etc.
- Aggregate Base Course
- Stabilizing Fabric
- Asphalt Pavement
- Paving Fabric
- Concrete Pavement
- Rotomilling
- Joint and Crack Sealing
- Fog Seal
- Chip Seal
- Slurry Seal
- Asphalt Patch
- Trench Cuts

- **Applied industry standards such as CDOT, FHWA, and AASHTO to local practices and conditions**

MGPEC Standards

- Design
 - Pavement design software
 - Form 9



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):

Design Level	Recommended Traffic Levels	Recommended PG Binder(s)
<input type="checkbox"/> $N_{req} = 50$	Low volume	<input type="checkbox"/> PG 58-28 or <input type="checkbox"/> PG 64-22
<input type="checkbox"/> $N_{req} = 75$	0 to <3 million ESALs	<input type="checkbox"/> PG 64-22 or <input type="checkbox"/> PG 58-28
<input type="checkbox"/> $N_{req} = 100$	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.
 - PG 76-28 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

MGPEC Task Forces

- **Sub-committees regarding a specific topic**
 - Specifications
 - Design standards
 - Accessibility
 - Life-cycle analysis
 - Smoothness
 - Subgrade

MGPEC Training

- Partnerships
 - Industry
 - Consultants
- Annual Meeting
- White Papers

Benefits

- Specifications based on local conditions and practices
- Low cost training
- Networking

Questions

www.mgpec.org

pamela@mgpec.org

303-979-2190

Pat Kennedy, PE
MGPEC Steering Committee Chairman
Denver Public Works, Street Maintenance

william.kennedy@denvergov.org

720-865-6860

