

WORKSHEET FOR A HVEEM MIX DESIGN AASHTO T 246

Project:	Date:
Contractor:	Class & Grading of mixture:
Asphalt supplier:	Grade of asphalt:
Sources for: Aggregates:	Mineral filler:
Testing laboratory name:	Phone:
Testing performed by:	
Testing reported by:	

English Metric

SUMMARY OF THE PROPOSED JOB-MIX-FORMULA

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| <ol style="list-style-type: none"> 1. Percent asphalt by mass of total mix¹, (P_b) 2. Air voids (V_a) 3. Voids in mineral aggregate (VMA) 4. Maximum specific gravity (G_{mm}) 5. Recommended plant mixing temperature,
(Attach Temperature Viscosity Curve) 6. Effective specific gravity of aggregate (G_{se}) 7. Stabilometer value | <ol style="list-style-type: none"> 8. Specific gravity of binder (G_b) 9. Specific gravity of mineral filler 10. Dust-to-Binder ratio (DP) 11. Moisture susceptibility test results: ² <ol style="list-style-type: none"> a. Dry strength, b. Wet strength, c. Index of retained strength, % |
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Gradation Designation:

GRADATION TARGET VALUES AND ALLOWABLE DEVIATIONS				SPECIFIC GRAVITY AND ABSORPTION		
Sieve Sizes	Job Mix Formula Target Value ³	Target Value Specification Range %	Allowable Deviation ⁴ %	<div style="display: flex; justify-content: space-between;"> Fine Aggregate (AASHTO T 84) Coarse Aggregate (AASHTO T 85) Combined Aggregate </div>		
				Bulk SG (G_{sb})		
				Bulk SSD SG		
				Apparent SG (G_{sa})		
				Absorption	%	%

¹ Establish asphalt cement content (percent by mass of mix) to the nearest 0.01 percent.
² See contract for moisture susceptibility test method: AASTHO T 165/T 167 or AASTHO T 283.
³ Establish target values to the nearest 0.1 percent as a part of the job mix formula.
⁴ Allowable deviations plus or minus from established target values.

WORKSHEET FOR A HVEEM MIX DESIGN (Continued)

Material Stockpile	Stockpile Description	Blend Ratio
A		%
B		%
C		%
D		%
E		%
Total		%

Stockpile Gradation

Sieve Size	Stockpile A %	Stockpile B %	Stockpile C %	Stockpile D %	Stockpile E %	Blended Stockpile Gradation	Job Mix Formula Target Values	Specification Limits

Aggregate Properties

Property	Result	Specification	Property	Result	Specification
LA Abrasion, % - Grading AASHTO T 96			Fractured Faces, % - ASTM D 5821		
Sodium Sulfate Soundness, % AASHTO T 104			Sand Equivalent AASHTO T 176, Alt method #2, reference method		
Durability index (Coarse) AASHTO T 210			Other:		
Durability index (Fine) AASHTO T 210			Other:		

WORKSHEET FOR A HVEEM MIX DESIGN (Continued)

Trial Number	1			2			3		
% Asphalt by mass of total mix, (P _b)									
Effective Binder Content (P _{be})									
Specimen height,									
Stabilometer value									
Bulk specific gravity, (G _{mb})									
Bulk unit mass,									
Max. specific gravity, (G _{mm})									
Dust-to-Binder ratio, (DP)									
% Air voids, (V _a)									
% Voids in mineral aggregate, (VMA)									
Average Stabilometer value									
Average % Air voids, (V _a)									
Average % Voids in mineral aggregate, (VMA)									
Average Bulk Unit Mass									
Trial Number	4			5			6		
% Asphalt by mass of total mix, (P _b)									
Effective Binder Content (P _{be})									
Specimen height,									
Stabilometer value									
Bulk specific gravity, (G _{mb})									
Bulk unit mass,									
Max. specific gravity, (G _{mm})									
Dust-to-Binder ratio, (DP)									
% Air voids, (V _a)									
% Voids in mineral aggregate, (VMA)									
Average Stabilometer value									
Average % Air voids, (V _a)									
Average Voids in mineral aggregate, (VMA)									
Average Bulk Unit Mass									

Test Results for Each of the Individual Moisture Susceptibility Test Specimens

Percent asphalt binder:	AASHTO T 165/T 167	AASHTO T 283	Specimen Dia:	6 inch	4 inch
Antistrip, type, amount:			Freeze cycle:	Yes	No

Sample I.D.								Average
Height	Dry							
	Wet							
Bulk Specific Gravity	Dry							
	Wet							
Air Voids	Dry							
	Wet							
Strength	Dry							
	Wet							
Retained Strength, %								

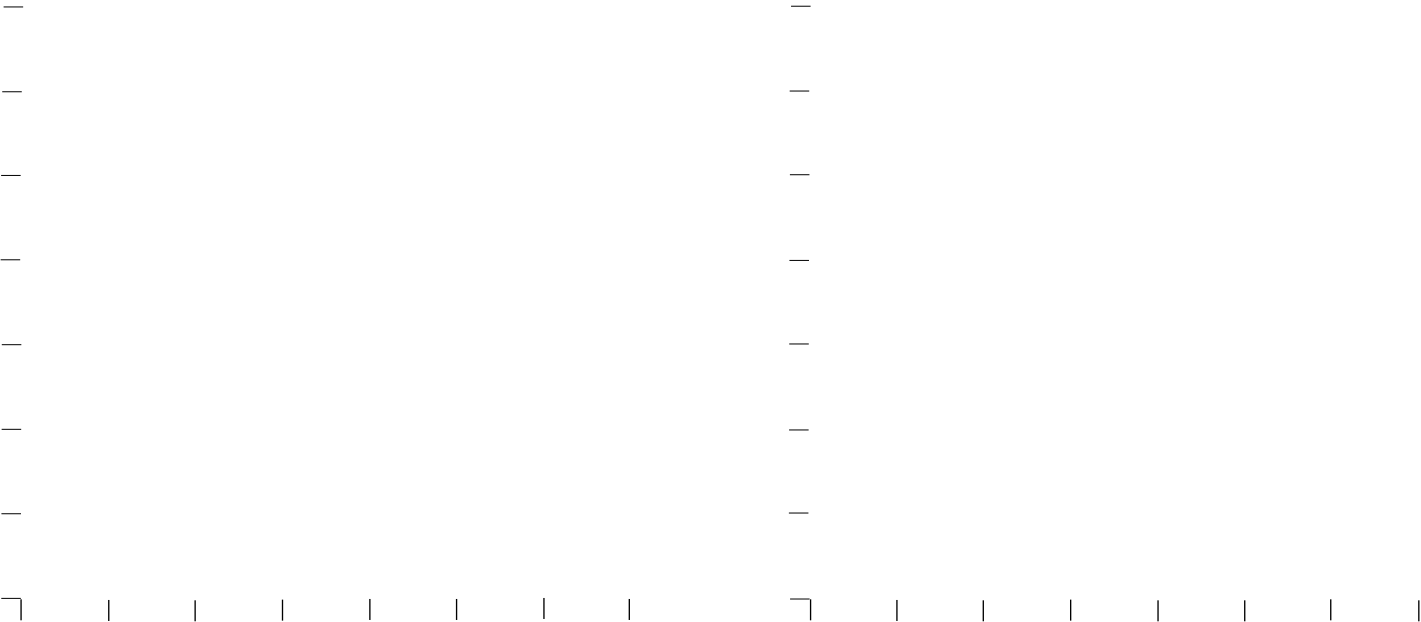
WORKSHEET FOR A HVEEM MIX DESIGN (Continued)

Design Curves for Proposed Job Mix Formula (JMF)

AIR VOIDS (V_a)

UNIT MASS

% Air voids (V_a)



% Asphalt binder (P_b)

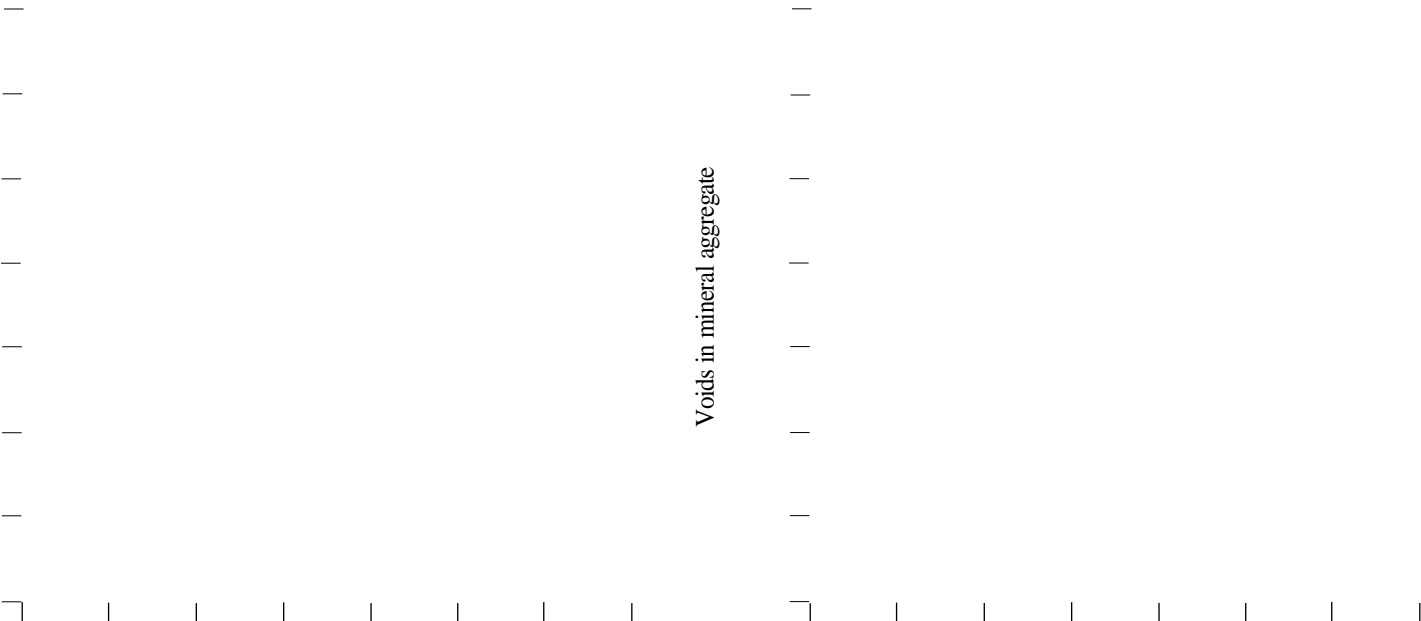
% Asphalt binder (P_b)

S-VALUE

VMA

Stabilometer values

Voids in mineral aggregate



% Asphalt binder (P_b)

% Asphalt binder (P_b)