

WORKSHEET FOR SUPERPAVE ASPHALT CONCRETE MIX DESIGN AASHTO R 35

Project: _____ Date: _____
 Contractor: _____ Nominal Maximum Aggregate Size, _____ : _____
 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

- | | |
|---|--|
| 1. Number of gyrations ($N_{int}/N_{des}/N_{max}$) _____
2. Percent binder by mass of total mix (P_b) ¹ _____
3. Percent binder by mass of aggregate _____
4. Air voids (V_a) at N_{des} _____
5. Voids in mineral aggregate (VMA) at N_{des} _____
6. Voids filled with asphalt (VFA) at N_{des} _____
7. Maximum unit mass (G_{mm}) _____
8. Effective specific gravity of aggregate (G_{se}) _____
9. Dust-to-Binder Ratio (DP) _____ | 10. Specific gravity of binder (G_b) _____
11. Recommended plant mixing temperature, (Attach Temperature Viscosity Curve) _____
12. Percent compaction at N_{max} _____
13. Hveem stabilometer value (If specified) _____
14. Moisture Susceptibility:
a. Dry strength, _____
b. Wet strength, _____
c. Index of Retained Strength, % _____ |
|---|--|

GRADATION TARGET VALUES AND ALLOWABLE DEVIATIONS			SPECIFIC GRAVITY AND ABSORPTION			
Sieve Sizes	Job Mix Formula Target Value ²	Allowable Deviation ³ %	Bulk SG (G_{sb})	Fine Aggregate (AASHTO T 84)	Coarse Aggregate (AASHTO T 85)	Combined Aggregate
			Bulk SG (G_{sb})	_____	_____	_____
			Bulk SSD SG	_____	_____	_____
			Apparent SG (G_{sb})	_____	_____	_____
			Absorption	_____ %	_____ %	_____ %

¹ Establish asphalt cement content (percent by mass of mix) to the nearest 0.01 percent.
² Establish target values to the nearest 0.1 percent as a part of the job mix formula.
³ Allowable deviations plus or minus from established target values.

WORKSHEET FOR A SUPERPAVE MIX DESIGN (Continued)

Trial Number	1		AVG		2		AVG		3		AVG	
% Asphalt by mass of total mix (P_b)												
Specimen height,												
Effective Binder Content (P_{be})												
Bulk specific gravity at N_{des} (G_{mb})												
% compaction at N_{int}												
% Air voids at N_{des} (V_A)												
Max. unit mass G_{mm}												
Voids in mineral aggregate (VMA) at N_{des}												
Voids filled with asphalt (VFA) at N_{des}												
Dust-to-Binder Ratio, (DP)												
Hveem Stabilometer value												
Trial Number	4		AVG		5		AVG		6		AVG	
% Asphalt by mass of total mix (P_b)												
Specimen height,												
Effective Binder Content (P_{be})												
Bulk specific gravity at N_{des} (G_{mb})												
% compaction at N_{int}												
% Air voids at N_{des} (V_A)												
Max. unit mass G_{mm}												
Voids in mineral aggregate (VMA) at N_{des}												
Voids filled with asphalt (VFA) at N_{des}												
Dust-to-Binder ratio, (DP)												
Hveem Stabilometer value												

Test Results for Each of the Individual Moisture Susceptibility Test Specimens

Percent asphalt binder: _____

AASHTO T 283

Specimen Dia: 6 inch 4 inch

Antistrip, type, amount: _____

Freeze cycle: Yes No

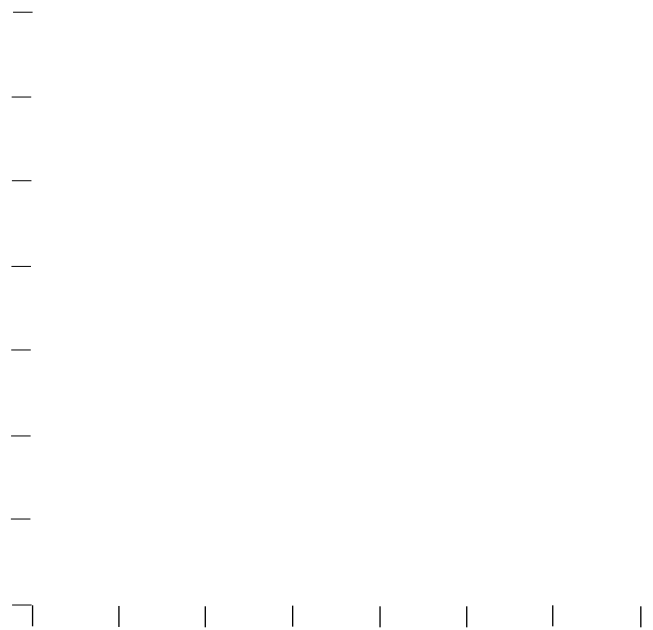
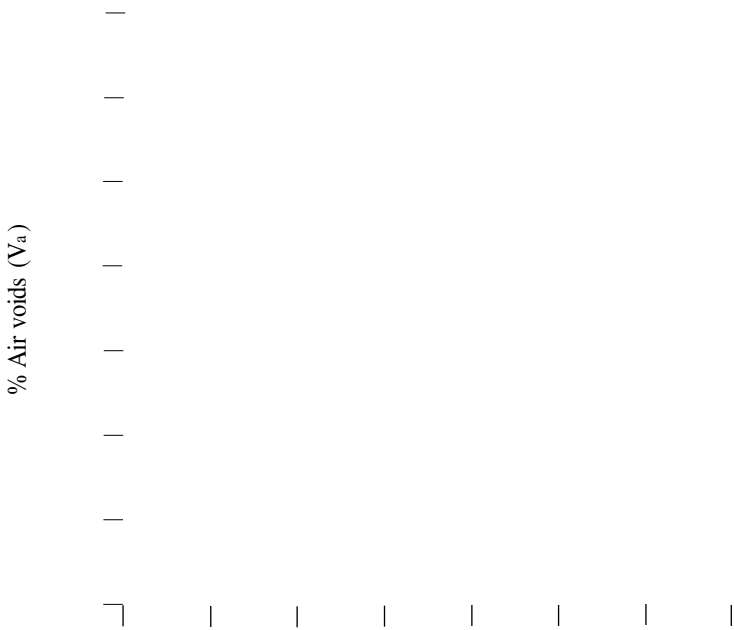
Sample I.D.								Average
Height	Dry							
	Wet							
Bulk Specific Gravity	Dry							
	Wet							
Air Voids	Dry							
	Wet							
Strength	Dry							
	Wet							
Retained Strength, %								

WORKSHEET FOR A SUPERPAVE MIX DESIGN (Continued)

Design Curves for Proposed Job Mix Formula (JMF)

AIR VOIDS (V_a)

UNIT MASS

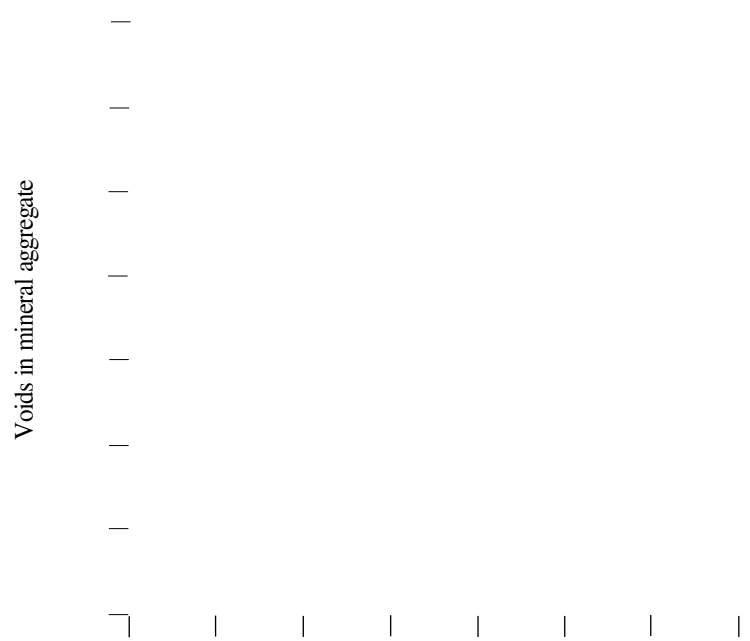
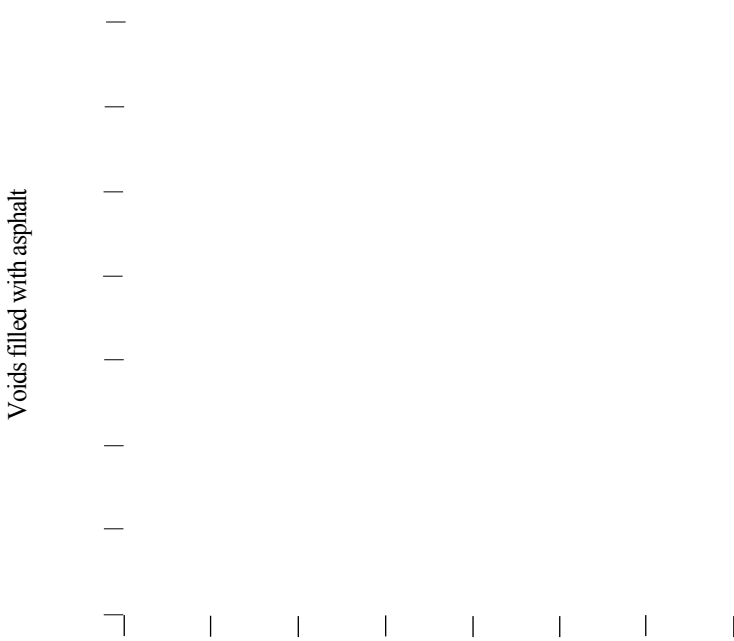


% Asphalt binder (P_b)

% Asphalt binder (P_b)

VFA

VMA



% Asphalt binder (P_b)

% Asphalt binder (P_b)

