

Laboratory Test Sheet

AIR VOID CONTENT - BS 598 : Part 104 : 1989 App. E

Client :	<u>Alfred McAlpine Civil Engineering</u>	Site :	<u>Stanton North Phase II</u>
Client Ref :	<u>12345</u>	Lab. Ref :	<u>10073</u>
Supplier :		Job No :	<u>B4240/96V</u>
Material Type :	<u>Sub-base</u>	Source :	
Material Name :	<u>Type 1 Sub-base</u>	Specification :	<u>Type 1 Sub-base</u>
		Binder Type/Grade :	

Test Values

Binder Content	(W ₈)	_____	%
Coarse Aggregate Content	(CA)	_____	%
Fine Aggregate Content	(FA)	_____	%
Filler Content	(F)	_____	%
Relative Density of Binder	(S ₈)	1.02	Mg/m ³ Assumed
Relative Density of Coarse Aggregate	(S ₁)	_____	Mg/m ³
Relative Density of Fine Aggregate	(S ₂)	_____	Mg/m ³
Relative Density of Filler	(S ₃)	_____	Mg/m ³
	[see Note 1]		
Core Specimen Density	(S _M)	_____	Mg/m ³

Volumetric Composition of the Specimen

$$a = (100\% - W_B) / 100$$

$$W_1 = CA \times a \quad \text{_____} \quad \%$$

$$W_2 = FA \times a \quad \text{_____} \quad \%$$

$$W_3 = F \times a \quad \text{[see Note 1]} \quad \text{_____} \quad \%$$

$$\text{Check : } W_1 + W_2 + W_3 + W_B \quad \text{[Should equal 100]} \quad \text{_____} \quad \%$$

Maximum Theoretical Mix Density

$$S_T = \frac{100}{\frac{W_1}{S_1} + \frac{W_2}{S_2} + \frac{W_3}{S_3} + \frac{W_B}{S_B}}$$

$$S_T = \text{_____} \quad \text{Mg/m}^3$$

Air Voids in the Mix (Core)

$$V_M = 100 \times \left\{ \frac{S_T - S_M}{S_T} \right\}$$

$$V_M = \text{_____} \quad \%$$

Comments : _____

Tested By : _____ Date : _____ Checked By : _____ Date : _____

Check Level (1/2/3)

Notes : (1) - Properties of Filler are only applicable to HRA wearing coarse mixes. In other mixes filler properties are derived from the Fines Aggregate.