

ABSOLUTE VOLUME CALCULATION SHEET

PROJECT / CUSTOMER: Midwest Cellular
 APPLICATION: impermeable
 MIX NUMBER: _____
 DATE: 7/17/2007

Design Density	25	pcf
Base Mix Density	111.5	pcf
Factor	1.942	
Expansion Factor	4.460	yd / yd place

BASE MIX

Materials	Spe. Gra.	Density (pcf)	Weight (lb) Ratio	Volume (ft^3)	lb / yd^3	Base Comp. (Vol. / ft^3)	Base additives	Description of Additives
Water	1.00	62.4	550	8.81	1068	17.12		
Cement	3.15	196.6	1000	5.09	1942	9.88		
Fly Ash	2.33	145.4	0	0.00	0	0.00		
Sand	2.65	165.4	0	0.00	0	0.00		
TOTALS			1550	13.90	3010	27.00	0.00	

BASE MIX WITH FOAM

Materials	Expanded Weight (lb)	Base Composite Volume	Additives after Foam (oz.)	Description of Additives
Water	240	3.84	0.0	0.00
Cement	435	2.22	0.0	0.00
Fly Ash	0	0.00	0.0	0.00
Sand	0	0.00	0.0	0.00
Sub-Total	675.0	6.1	0.0	
Foam		20.9		
TOTALS		27.0		

Grout out	1.24	cfm
Nozzle Need	4.29	cfm
Set water	1.03	gpm

Sample Id.	Compressive (psi)	Age (days)	Date Tested
25	90.0	28.0	
30	145.0	28.0	
35	240.0	28.0	