

CMT Engineering Laboratories

CONCRETE MIX DESIGN

CUSTOMER: Withgaia Design

DATE: August 12, 2010

PROJECT: Various Residential Projects

Intended Use: Flatwork

CLASS: 4500 @ 56 days

LAB NUMBER: 0

MIX NUMBER: 1

LAB NUMBER:	0	WEIGHT IN POUNDS	VOLUME IN CUBIC FEET	WEIGHT IN KILOGRAMS	VOLUME IN CUBIC METERS
CEMENT		408	2.08	242	0.077
FLY ASH		175	1.42	104	0.052
MICROSILICA		0	0.00	0	0.000
WATER		254	4.08	151	0.151
TOTAL AIR CONTENT		6.0 %	1.62	0	0.060
Sand: Concrete Sand		1235	7.66	733	0.284
Sand: None		0	0.00	0	0.000
Course: 3/4" Con Agg		1608	10.15	954	0.376
Course: Pea Gravel		0	0	0	0.000
TOTALS		3686 lbs/Y'	27.00 FT³	2184 Kg/M³	1.000 M³
WATER CEMENT RATIO:	0.44	GALLONS/BAG:	4.92	BAGS OF CEMENT:	6.20
TOTAL GALLONS PER YARD:	30.5	UNIT WEIGHT PCF:	136.5	TOTAL CEMENT :	583

SOURCE DATA

SOURCE OF PRODUCT	AGGREGATE RATIO	SP.GR. @ SSD	PERCENT ABSORPTION
CEMENT: Holcim II/V		3.150	
FLY ASH: Phoenix Cement-Salt River		1.980	
MICROSILICA: None		0.000	
Sand: Concrete Sand	43	2.584	2.33
Sand: None	0	0.000	0.00
COURSE: 3/4" Con Agg	57	2.538	2.30
COURSE: Pea Gravel	0	2.553	2.30

DOSE RATE	Product	OZ/100Wt.	OZ/Yard	Range		
				Min.	Max	
AIR ADMIX:	BASF AE90	1.49	8.69	4.35	13.04	Use Fritz pak to adjust air
Lowrange Water Reducer:	BASF 322N	4.0	23.32	11.66	34.98	
Highrange Water Reducer:	None	0.0	0	0.00	0.00	
Hydration Controller	Delvo	0.0	0	0.00	0.00	
0	0	0.0	0	0.00	0.00	

CMT Engineering Laboratories

CONCRETE MIX DESIGN

CUSTOMER: Withgaia Design

DATE: August 12, 2010

PROJECT: Various Residential Projects

Intended Use: Footing and Foundation

CLASS: 3000 @ 56 days

LAB NUMBER: 0

MIX NUMBER: 1

LAB NUMBER:	0	WEIGHT IN POUNDS	VOLUME IN CUBIC FEET	WEIGHT IN KILOGRAMS	VOLUME IN CUBIC METERS
CEMENT	311	1.58	185	0.059	
FLY ASH	206	1.67	122	0.062	
MICROSILICA	0	0.00	0	0.000	
WATER	235	3.77	139	0.139	
TOTAL AIR CONTENT	6.0 %	1.62	0	0.060	
Sand: Concrete Sand	1155	7.16	685	0.265	
Sand: None	0	0.00	0	0.000	
Course: 3/4" Con Agg	1774	11.20	1053	0.415	
Course: Pea Gravel	0	0	0	0.000	
TOTALS	3687 lbs/Y'	27.00 FT ³	2184 Kg/M ³	1.000 M ³	
WATER CEMENT RATIO:	0.45	GALLONS/BAG:	5.12	BAGS OF CEMENT:	5.50
TOTAL GALLONS PER YARD:	28.2	UNIT WEIGHT PCF:	136.6	TOTAL CEMENT :	517

SOURCE DATA

SOURCE OF PRODUCT	AGGREGATE RATIO	SP.GR. @ SSD	PERCENT ABSORPTION
CEMENT: Holcim II/V		3.150	
FLY ASH: Phoenix Cement-Salt River		1.980	
MICROSILICA: None		0.000	
Sand: Concrete Sand	39	2.584	2.33
Sand: None	0	0.000	0.00
COURSE: 3/4" Con Agg	61	2.538	2.30
COURSE: Pea Gravel	0	2.553	2.30

DOSE RATE	Product	OZ/100Wt.	OZ/Yard	Range		
				Min.	Max	
AIR ADMIX:	BASF AE90	1.68	8.69	4.35	13.04	Use Fritz pak to adjust air on site
Lowrange Water Reducer:	BASF 322N	4.0	20.68	10.34	31.02	
Highrange Water Reducer:	None	0.0	0	0.00	0.00	
Hydration Controller	Delvo	0.0	0	0.00	0.00	
0	0	0.0	0	0.00	0.00	

January 5, 2011

WIGHGAIA DESIGN

P.O. BOX 264

MOAB UT 84532

Compressive Strength Test

ASTM: C143, C231, C31, C39, C138, C1064

AASHTO: T119, T152, T23, T22, T121, T309, T97

PROJECT #: 4472

PROJECT: MISC. TESTING

CONTRACTOR: Withgala Design

POUR ADDRESS: Wyle Residence

TEST LOCATION: Unknown

ITEM: :

SPEC: 0.0 MPa SLUMP: 0.00 AIR: 0
MIX: AGE: 0 AIR ADMIX: 0
BAG MIX: WATER ADDED: 0 TEMP CONC: 0
TYPE CEMENT: ADMIX: TEMP AIR: 0
TOT YARDS: POZZOLAN: PLANT:
UNIT WT.: 0.00 HOT WATER: SUPPLIER: Unknown
TICKET #: FIELD STORAGE: N/A SET #: 001
DATE CAST: 10/27/10 TRUCK NBR: CAST BY: CUSTOMER

LAB NUMBER	DIAM (IN.)	AREA SQ. IN.	DATE BROKEN	TOTAL LOAD LBS.	COMPRESSIVE PSI/MPa	TYPE BREAK	AGE DAYS	PERCENT STRENGTH
233589	4.00	12.57	11/03/10	24330	1940 13.3	A	7	
233590	4.00	12.57	11/03/10	26420	2100 14.5	A	7	
233591	4.00	12.57	12/22/10	50060	3980 27.5	D	56	
233592	4.00	12.57	12/22/10	47900	3810 26.3	D	56	
233593	4.00	12.57	12/06/10	44640	3550 24.5	D	40	
233594	4.00	12.57	12/06/10	36990	2940 20.3	D	40	

28 Day Broken by:

Average 28 Day Strength: 0

Remarks: Cast by Client



Manager