

Chicora Foundation Gas Displacement Mortar Analysis Data Sheet

Name: Edison Rosendale 12M **Sample No.:** 2005-9
Date: 8/19/05 **Origin of Sample:** Edison Coatings #3005 reported to be
 1.6:0.4:1 Rosendale:lime:sand; 28-day set

Visual Description of sample (color, texture, hardness, inclusions, etc.):
 Very pale brown (10YR8/2); somewhat friable, multiple inclusions, small black flecks and quartz-like material; Edison reports that some aggregate is calcareous

Mortar Analysis

Original weight of powdered sample (in g)	5.31
Weight of filter paper (in g)	2.26
Weight of filter paper + dry fines (in g)	3.03
Weight dry fines (in g)	0.77
Weight of dry sand (in g)	2.05
Gas Displacement (in ml)	174.00
Weight of lime (in g)	0.78
% of sand	38.61
% of fines	14.50
% of lime	14.72
% of acid solubles	32.17

Observations (dissolution of binder, color of liquid, reaction):
 Immediate semi-aggressive reaction; liquid turns brownish-yellow; somewhat long reaction (about 5 minutes)

Characterization of Sand:

		wt (gm)	%
Microscopic Examination: Sub-rounded to angular; well sorted; mostly quartz (clear, opaque, citrine, smoky); some mica?; small amounts of granite?	wt.-% finer than		
	4.75mm	0.00	0
	2.36mm	0.00	0
	1.18mm	0.09	4.390244
	600µm	0.36	17.56098
	300µm	0.88	42.92683
	150µm	0.48	23.41463
	75µm	0.20	9.756098
	53µm	0.04	1.95122
	38µm	0.00	0
Total sand weight		2.05	

Munsell Color(s) of Sand: brown (10YR5/3), but multi-colored

