

Chicora Foundation Gas Displacement Mortar Analysis Data Sheet

Name: Edison Rosendale 14S **Sample No.:** 2005-10
Date: 8/129/05 **Origin of Sample:** Edison Coatings #3012; reported to be
 1.6:0.4:1 Rosendale:lime:sand; 28-day set

Visual Description of sample (color, texture, hardness, inclusions, etc.):
 Light gray (10YR7/2); somewhat friable; slightly rough texture; many inclusions, some black, mica like

Mortar Analysis

Original weight of powdered sample (in g)	5.54
Weight of filter paper (in g)	2.25
Weight of filter paper + dry fines (in g)	3.23
Weight dry fines (in g)	0.98
Weight of dry sand (in g)	2.44
Gas Displacement (in ml)	59.00
Weight of lime (in g)	0.27
% of sand	44.04
% of fines	17.69
% of lime	4.78
% of acid solubles	33.48

Observations (dissolution of binder, color of liquid, reaction):
 Immediate semi-aggressive reaction, but died down quickly; liquid turned yellowish brown; reaction lasted for about 5 minutes

Characterization of Sand:

	wt. / % finer than		wt (gm)	%
Microscopic Examination: Sub-rounded to angular; well sorted; majority is quartz (clear, opaque, citrine, smoky), also some mica?, perhaps granite?	4.75mm		0.00	0
	2.36mm		0.00	0
	1.18mm		0.03	1.229508
	600µm		0.31	12.70492
	300µm		1.09	44.67213
	150µm		0.66	27.04918
	75µm		0.27	11.06557
	53µm		0.08	3.278689
	38µm		0.00	0
	Total sand weight			2.44

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

