

Sampling & Testing Guide-Minimum Frequency

CONCRETE DRILLED SHAFT FOUNDATIONS

Section 2433

Matls. IM 204
Appendix I

October 18, 2011
Supersedes April 20, 2010

MATERIAL OR CONSTRUCTION ITEM	TESTS	METHOD OF ACCEPTANCE & RELATED IMS	QUALITY CONTROL				INDEPENDENT ASSURANCE & VERIFICATION S&T					REMARKS		
			SAMPLE BY	FREQ.	SAMPLE SIZE	TEST BY	REPORT	S&T TYPE	SAMPLE BY	FREQ.	SAMPLE SIZE		TEST BY	REPORT
SOURCE INSPECTION														
Aggregate-Fine (4110)		AS												
Aggregate-Coarse (4115)		AS												
Portland Cement (4101)	Quality	AS												
Fly Ash (4108)	Quality	AS												
Mixing Water (4102)	Quality								DME	1/project	1 quart	CTRL	731	Not required for potable water from Municipal Supply
Air Entraining Admixture	Quality	AS												
Retarding Admixture	Quality	AS												
Reinforcing Steel Bars (4151)	Quality	AS												
Permanent Casing	Quality	Cert A												According to plans or other instructions
Drilling Slurry		Visual												
AS-Approved Source ASD-Approved Shop Drawing S&T-Sampling & Testing		Cert A-Type A Certification Cert C-Type C Certification Cert D-Type D Certification							RCE-Resident Construction Engineer/Project Engineer DME-District Materials Engineer CTRL-Central Materials Office CONTR-Contractor					IA-Independent Assurance V-Verification

Quality samples not required when mix quantity is less than 50 cu. yd.

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PLANT INSPECTION														
Aggregate- Fine (4110)	Gradation	302, 306 336	CONTR	3/lot	IM 301	CONTR	800240	IA V	DME RCE/ CONTR	1/1000 cy 1 st day+20%	IM 301 IM 301	DME RCE		System Approach Applicable
	Moisture	308, 528	CONTR	1/lot	1000 gm	CONTR								See IM 528 if Moisture Probe is used
	Sp. Gr.	307	CONTR	IM 528	1000 gm	CONTR								
	Quality	AS 209												
Aggregate- Coarse (4115)	Gradation	302, 306 336	CONTR	3/lot	IM 301	CONTR		IA	DME RCE/ CONTR	1/1000 cy 1 st day+20%	IM 301 IM 301	DME RCE		System Approach Applicable
	Moisture	308, 528	CONTR	1/lot	2000gm	CONTR								
	Sp. Gr.	307	CONTR	IM 528	2000gm	CONTR								
	Quality	AS 209						V	DME	1/1000 cy	50 lb	CTRL		
Portland Cement	w/c ratio	528	CONTR	1/pour		CONTR								
	Quality	AS Cert D						V	DME	1/1000 cy	15 lb	CTRL		
Fly Ash	Quality	AS Cert D		Each Load			800240							
Air-Entraining Admixture (4103)		AS 403						V	DME	1/batch	1 pint	CTRL		Sample lots not previously reported or as required by DME
Retarding Admixture		AS 403						V	DME	1/batch	1 pint	CTRL		Sample lots not previously reported or as required by DME
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GRADE INSPECTION														
Plastic Concrete	Air Content	316, 327						V IA	RCE	1/30 cy		RCE DME		DME may adjust
	Slump	317, 327						V IA	RCE	1/30 cy		RCE DME		DME may adjust
	Cylinders								DME	3/project		DME		Primary Projects Only (Information only)
Reinforcing Steel (4151)	Quality	AS Cert A		Each Shipment			Field Book							
Metal Access Pipe		Visual												
Drilling Slurry	Density, Viscosity, pH, Sand Content	387	CONTR	1/ 2 hours		CONTR								1/ 4 hours if consistent
Crosshole Sonic Log Test		2433	CONTR	1/shaft		CONTR	Report, Analysis, Interpretation							
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NOTE: IA may be accomplished by system approach or on a per project basis (IA at 1 per project) at the discretion of the DME according to IM 207.