TEST METHODS FOR EVALUATING EXISTING FOUNDATIONS

by The Structural Committee of The Foundation Performance Association Houston, Texas

Document # FPA-SC-02-CC (DRAFT)

www.foundationperformance.org

ISSUE HISTORY (Initial issue and issues outside the Structural Committee)

Rev #	Date	Description	Subcommittee Chair	Subcommittee Members
Α	7 Nov 07	For Committee Review	Al Bustamante	Gerard Duhon
В	6 Feb 08	For Committee Review		Denis Hanys
С	12 Mar 08	For Committee Review		Ron Kelm
D	2 April 08	For Committee Review		Gerald Lowe
Е	7 May 08	For Committee Review		Bob Newman
F	4 June 08	For Committee Review		Michael Skoller
G	2 July 08	For Committee Review		George Wozny
Н	6 August 08	For Committee Review		Nicole Wylie
1	5 November 08	For Committee Review		
J	3 December 08	For Committee Review		
K	14 January 09	For Committee Review		
L	4 February 09	For Committee Review		
M	4 March 09	For Committee Review		
N	6 May 09	For Committee Review		
0	3 June 09	For Committee Review		
Р	8 July 09	For Committee Review		
Q	2 September 09	For Committee Review		
R	7 October 09	For Committee Review		
S	4 November 09	For Committee Review		
Т	2 December 09	For Committee Review		

U	13 January 10	For Committee Review	
V	3 February 10	For Committee Review	
W	10 March 10	For Committee Review	
Χ	7 April 2010	For Committee Review	
Υ	5 May 2010	For Committee Review	
Z	2 June 2010	For Committee Review	
AA	6 July 2010	For Committee Review	
BB	21 July 2010	For Committee Review	
CC	3 August 2010	For Committee Review	



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1.0 INTRODUCTION

Scope

The purpose of this document is to provide general guidelines for common types of foundation test methods, based on sound science, used to troubleshoot problems and evaluate the conditions of existing foundations. This document is targeted for engineers and others familiar with the evaluation of existing foundations. This document does not include guidelines for quality control and quality assurance of foundations under construction or foundation repairs. The foundation evaluation methods discussed in this document are primarily intended for lightly loaded concrete foundations and pavements.

General Considerations

There are general considerations that apply to each test method described in this document. The general consideration categories include cost, portability of testing equipment, user skill level, data processing, invasiveness, qualitative/quantitative type of method, and others. Cost considerations for each method are based on the rental or purchase of equipment. This cost criteria does not include contractor or professional service fees unless specifically stated in the applicable section of this document. The costs are quantified relatively into a range of five categories from least to most expensive using the following symbols:



In addition to the general considerations that apply to each test method described later in this document, there are other items to consider, which include the following:

- 1. Calibration of test results often requires some level of intrusion. Verification of test results, which could include core sampling, drilling, use of different test methods for comparison, and others, is required to calibrate the results obtained from the test methods.
- 2. The test methods that require the use of proprietary equipment should be calibrated and performed following the equipment manufacturer's written instructions.
- 3. The list of additional resources under each test method is not intended to be all inclusive.

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