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Cementitious Repair Material Data Sheet—Guide

Reported by ACI Committee 364

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Cementitious Repair Material Data Sheet—Guide

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Cementitious Repair Material Data Sheet—Guide

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The purpose of this document is to provide a guide to the protocol for testing and reporting of data for cementitious repair materials. It does not address all the issues associated with material selection. It is the responsibility of the user of this document to determine the suitability of the repair material before use.

Keywords: data sheet protocol; material characteristics; material properties; packaging; repair materials; test methods; user guide.

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CHAPTER 1—INTRODUCTION AND SCOPE

1.1—Introduction

The guidance on testing and reporting verifiable properties of mortar, extended mortar, and concrete is primarily intended for the manufacturer, to make sure the repair material data sheets are prepared in a standard way, with reproducible and comparable information. The manufacturer should use it for developing products based on market needs and technology improvements. The information provided in this guide is useful to the specifier in choosing verifiable properties consistent with the requirements of a particular repair situation. It provides the general user education on the range of material characteristics and properties that may impact a repair and on the nuances of the various tests available for that matter.

1.2—Scope

To facilitate readability of this guide, Chapters 4 through 8 are in two-column format. The first column provides guidance for the protocol for testing and reporting of data for cementitious repair materials to allow objective comparison between alternative products. The second column provides guidance and referenced sources for additional information presented in the first column. It does not address every issue associated with material selection; for further discussion, refer to ACI 546.3R. The characteristics and properties described in this document do not necessarily need to be reported, depending on the nature of the material and its intended use. Certain tests may not be appropriate for some materials. Materials containing lightweight aggregate or heavyweight aggregate are beyond the scope of this document, as typically specialized tests are required for these materials.

The test methods used for the determination of the reported data should be selected from those listed in Table 1.2 and further explained within the document. The table covers most of the characteristics and properties generally of interest for cementitious materials, although it does not preclude others to be reported. Test data should be reported in the order and sections as listed, with the test method(s) used explicitly mentioned adjacent to it. Variations in the standardized test methods or substitute test methods prevent direct comparison between alternative materials by the specifier. Any additional test methods, non-standardized methods, or deviations from the test methods in this document should be reported and documented in sufficient detail to allow the specifier to evaluate the likely impact on test results and to allow other laboratories to repeat the testing within acceptable repeatability and reproducibility.

Additional information describing the significance and use of the test methods described herein may be found in ACI 546.3R and ICRI 320.2R. In comparison with these documents, ACI 364.3R/ICRI 320.3R serves a very different purpose—that is, guidance on uniformized testing and reporting Material Data Sheet information. While ACI 546.3R lists standardized tests only, without directions, ACI 364.3R/ICRI 320.3R provides guidance on testing and