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Report on Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions

Reported by ACI Committee 207



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This report identifies practices for evaluating the physical properties of concrete in existing structures. Although general knowledge of the structural design used for the principle structures of a project is essential for determining procedures and locations for evaluation of the concrete physical properties, analysis for the determination of structural capacity is not within the scope of this report. This report recommends project design, operation and maintenance records, and in-service inspection data to be reviewed. Existing methods of making condition surveys and nondestructive tests are reviewed; destructive phenomena are identified; methods for evaluation of tests and survey data are presented; and preparation of a final report is discussed.

Keywords: alkali-aggregate reaction; cement; cracking; erosion; mass concrete; post-tensioning; pozzolan; roller-compacted concrete; spalling.

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