

FORWARD TO THE THIRD EDITION

The concrete repair, protection and strengthening industry is driven by deterioration of, damage to, and defects in concrete structures along with changes in use and code requirements. The annual cost to owners for repair, protection and strengthening is estimated between \$18 billion and \$21 billion in the U.S. alone. The result is a repair industry that supports engineers, architects, equipment suppliers, material manufacturers, researchers, educators, testing companies, contractors, and lawyers. The recent explosive growth of the industry in the past 25 years has resulted in the need for many improvements in materials, design practice, installation procedures, contracting processes, QA/QC procedures, education, and more. These improvements are needed to improve service life, reduce costs, and reduce conflicts.

In 1997, a grass roots initiative was developed by several committees within ACI (The American Concrete Institute) to provide focus of repair activities. In 1998, ACI's Technical Activities Committee established the TAC Repair and Rehabilitation Committee (TRRC). An early task of TRRC was a compilation of selected U.S. documents related to concrete repair, which became the first edition of the Concrete Repair Manual. The first edition was published jointly by ACI and ICRI (the International Concrete Repair Institute) in 1999.

In keeping with one of TRRC's standing goals, and because of the success of the first edition of the Concrete Repair Manual, planning for a second edition began in 2000. Consistent with one of the major objectives in ACI's 2001 Strategic Plan, to have ACI be a worldwide knowledge source for concrete, the development of the second edition of the Concrete Repair Manual included broad-based participation by several European organizations. The second edition was released in 2003.

In 2004, ICRI hosted, and the SDC (Strategic Development Council) facilitated an industry wide-strategic planning meeting for the concrete repair industry, called "Vision 2020." Over 100 representatives of the diverse concrete repair and protection industry recognized the importance of a unified vision. They have identified potential breakthroughs in materials, equipment, industry cooperation, research and funding, professional practice, design methodology, environmental impact, workforce supply and owner education. They believe this effort will significantly advance the industry by improving repair quality, reducing repair cost, and enhancing the safety of workers and the public.

Goal 1 of the Vision 2020 plan is as follows:

By the year 2010 the industry will have established mechanisms for industry cooperation to facilitate better and faster worldwide creation of concrete repair and protection technology and dissemination of information about the technology.

One of the main strategies under this goal is to manage the Concrete Repair Manual project, and to develop future editions. To achieve this goal, the third edition of the Concrete Repair Manual includes documents from 6 of the 9 endorsing associations of the Vision 2020 plan. These include:

- American Concrete Institute (ACI)
- BRE (formerly the British Research Establishment)
- The Concrete Society
- International Concrete Repair Institute (ICRI)
- NACE International (formerly National Association of Corrosion Engineers)
- SSPC: Society for Protective Coatings

There are also documents from the United States Army Corps of Engineers included in the third edition.

It should be noted that the documents included in this edition have been developed and processed according to the procedures of the respective organizations. Publishers of the third edition are ACI and ICRI.

This Manual would not have been possible without the assistance and cooperation of many individuals from North America and the U.K. The cooperation of the various organizations and individuals that made this edition a reality should be recognized as unique in the concrete repair industry.