# NRCA's new waterproofing manual

by **Mark S. Graham**

In January, NRCA published *The NRCA Waterproofing Manual*. This new manual, which is separate from and intended to complement *The NRCA Roofing and Waterproofing Manual, Fifth Edition*, provides detailed technical information regarding waterproofing and dampproofing buildings and other structures, including below-grade constructions, vertical applications and plaza decks.

## Format and content

*The NRCA Waterproofing Manual* is a soft-cover, 140-page, bound document consisting of four primary sections: General Project Considerations, Waterproofing and Dampproofing Guidelines, Waterproofing Construction Details and Glossary.

The General Project Considerations section provides information regarding topics applicable to all waterproofing projects. For example, in addition to quality control and quality assurance when waterproofing horizontal surfaces, NRCA also recommends an appropriate water test be conducted to document a waterproofing system's watertight performance before the placement of any overburden or topping material. Several water tests are described in the manual for specific project conditions.

The Waterproofing and Dampproofing Guidelines section provides detailed information regarding the design, materials and installation of quality, long-lasting waterproofing and dampproofing systems. Because waterproofing systems are intended to prevent the passage of water under hydrostatic conditions and dampproofing systems resist the passage of moisture in the absence of hydrostatic pressure, it is important proper system type, materials and installation techniques be used.

Also, as a general rule, when waterproofing over structural substrates, NRCA recommends waterproofing materials be fully adhered or bonded directly to substrates to reduce the possibility of lateral water migration between a waterproofing material and substrate. Loose-laid waterproofing materials may be appropriate for some applications, such as when waterproofing material is installed directly against earth, such as in work slabs, pools, ponds, lagoons and reservoirs.

The Waterproofing Construction Details section provides detail drawings for about 50 common waterproofing construction detail conditions. NRCA recognizes the details do not address all conditions that will be encountered in waterproofing systems; however, they address representative conditions and provide a basis for developing project-specific detail drawings.

The Glossary provides definitions for about 700 terms related to waterproofing and dampproofing.

## Manual development

*The NRCA Waterproofing Manual* was developed by NRCA's Waterproofing Task Force, a group of knowledgeable, practicing waterproofing contractors.

In addition, members of NRCA's Manual Update Committee, Technical Operations Committee and Executive Committee provided review comments for the manual and input and guidance to the task force.

In the manual, NRCA presents time-tested and proven best-practice design guidelines, material guidelines and installation guidelines for quality, long-lasting waterproofing systems that are appropriate throughout the United States. This approach is similar to that NRCA has taken with *The NRCA Roofing and Waterproofing Manual, Fifth Edition*.

NRCA's guidelines for waterproofing and dampproofing may be more conservative than practices employed by some designers, manufacturers and installers. NRCA recognizes some designs and applications may vary according to climatic conditions and some geographic areas may employ area practices different from those in the manual that are sound and time-proven.

## The future

The science and art of waterproofing buildings and other structures continue to change spurred largely by technological innovations and new product developments. Ongoing and new research also is expanding the industry's knowledge of waterproofing systems and their design and installation. NRCA is committed to maintaining the manual as an up-to-date, authoritative technical reference concerning the design and installation of quality waterproofing systems.

Updated editions of this manual are planned as new significant information about waterproofing systems and their design and installation becomes available.

*The NRCA Waterproofing Manual* can be purchased from NRCA by contacting NRCA InfoExpress at (866) ASK-NRCA (275-6722) or via shop.nrca.net.

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