Concrete Finishing

L1 CONCRETE FINISHING

Curriculum Notes

- 160 Hours
- Includes 72.5 hours of Core Curriculum, which is a prerequisite for Level 1 completion and must be purchased separately.
- Published: 1998
- A Spanish translation is available. Please see NCCER’s online catalog for more information.
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.

PAPERBACK
Trainee Guide: $69.99
978-0-13-010246-1
Individual Modules: $24.99
see module list

MODULES
The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Introduction to Concrete Construction and Finishing
(Module ID 23101) Provides an introduction to the methods and procedures used in concrete finishing. Introduces terms of the trade and tools and equipment used to place, finish, and cure concrete. Explains methods and techniques for constructing concrete structures.

Safety Requirements
(Module ID 23102) Explains safety requirements for concrete construction and finishing. Provides information on OSHA requirements with regard to hazard communication, fall protection, and use of personal protective equipment. Covers topics such as general work site safety, use of chemicals, and safe use of hand and power tools.

Properties of Concrete
(Module ID 23103) Introduces the properties of concrete and the components that make up the concrete mixture. Describes chemical and physical properties of cement, aggregate, and admixtures. Explains basic tests used to determine properties such as slump and ultimate strength.

Tools and Equipment
(Module ID 23104) Describes tools and equipment used in the production, placing, and curing of concrete. Explains safe operation and maintenance requirements. Provides opportunities for hand tool operation and demonstration of larger pieces of power equipment.

Preparing for Placement
(Module ID 23105) Details the methods and procedures used to prepare for placing concrete. Covers site layout, forms requirements, and subgrade preparation. Describes requirements for joints and reinforcement. Explains how to order concrete from a mixing or batch plant.

Placing Concrete
(Module ID 23106) Presents requirements and methods for properly placing concrete. Includes information on conveying and placing fresh concrete using equipment such as wheelbarrows, pumps, and conveyors. Describes techniques for spreading, consolidating, and striking off concrete.

Finishing, Part One
(Module ID 23107) Describes basic finishing techniques for slabs and other horizontal structures. Explains the proper use of floats, trowels, edges, and groovers. Discusses requirements for cutting joints using different types of saws. Provides hands-on practice for finishing concrete slabs.

Curing and Protecting Concrete
(Module ID 23108) Introduces methods and procedures used in curing and protecting concrete. Covers curing commonly performed for both horizontal and vertical placement. Describes techniques for protecting concrete during hot and cold weather.

Introduction to Troubleshooting
(Module ID 23109) Describes problems of placing, finishing, and curing. Defines symptoms of problems and discusses their causes. Presents ways to reduce or eliminate these problems.

L2 CONCRETE FINISHING

Curriculum Notes

- 167.5 Hours
- Published: 1999
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.

PAPERBACK
Trainee Guide: $59.99
978-0-13-014860-5
Individual Modules: $24.99
see module list

MODULES
The modules listed below are included in the Trainee Guide. The following ISBNs are for ordering individual modules only.

Forming
(Module ID 23203) Describes forming requirements. Includes types of forms, forming materials, use of release agents, form accessories, placement of anchors and embenders, and form removal. Highlights safety requirements with emphasis on respirating precautions and procedures.

Site Concrete
(Module ID 23204) Describes the formation and finishing of concrete. Includes special surface treatments, special forms, and form liners.

Architectural Finishes
(Module ID 23205) Introduces architectural concrete and architectural finishes. Discusses the surface classes of architectural concrete. Includes special surface treatments, special forms, and form liners.

Industrial Floors
(Module ID 23206) Describes the construction and finishing of this special class of concrete work, including special tools and finishing techniques. Explains procedures for preparation, joint layout, placing, finishing, and curing.

Superflat Floors
(Module ID 23207) Presents requirements for constructing superflat floors and techniques used to achieve required results. Explains procedures for preparation, placing, finishing, and curing. Describes techniques for measuring tolerances of slabs and methods for troubleshooting during placement and finishing. Explains repair procedures.

Surface Treatments
(Module ID 23208) Provides an overview of surfacing treatments applied to concrete structures. Includes the requirements for and application of dry shakes, self-leveling toppings, epoxies, and shotcrete.

Quality Control
(Module ID 23209) Introduces the ideas and tasks related to sampling, testing, and inspecting concrete and its component materials. Describes types of specifications, along with the standard procedures for sampling and testing concrete mix. Covers inspection procedures for forms, construction methods, and finishing.

Making Repairs
(Module ID 23210) Explains the requirements for making repairs to concrete based on specific problems. Explains and demonstrates repair methods. Describes the use of special tools and materials.