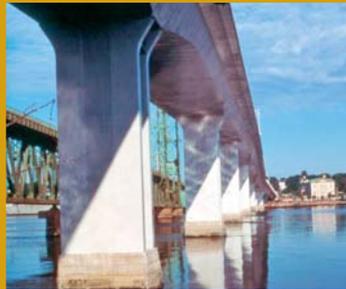


CRSI[®]

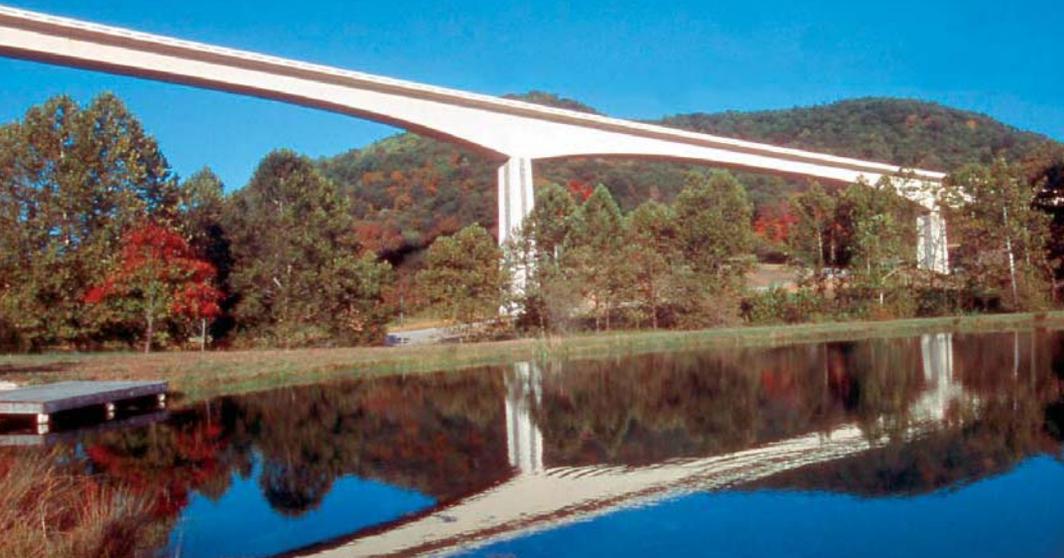
Concrete Reinforcing
Steel Institute

Products & Services



*Publications, Software and Technical Resources
for Design and Construction Professionals*

Reinforce Your Future



About the Concrete Reinforcing Steel Institute

Founded in 1924, the Concrete Reinforcing Steel Institute is a not-for-profit organization dedicated to helping the design and construction industries in the best uses and applications for reinforced concrete structures. CRSI is involved in the marketing, promotion, research and engineering support necessary for the safe and proper use of materials. CRSI conducts workshops and seminars, and provides educational materials developed by the CRSI technical staff and CRSI technical committees. Materials include publications, videos and software used by designers, engineers, contractors and architects.

In addition, CRSI works on codes, standards, and engineering practices that affect the construction industry.

Professional membership is available to individuals within the design and construction industries. You will receive many benefits for \$125 per year:

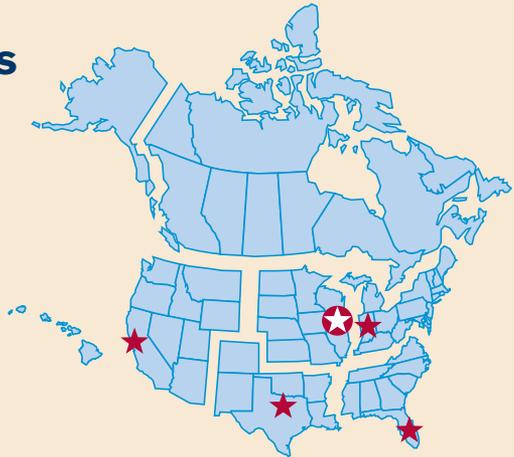
- Save on CRSI publications (buy at member prices)
- Take part in a technical information exchange
- Enjoy authorship opportunities

Call or email CRSI for a Professional Membership Application.

CRSI Headquarters

933 North Plum Grove Road
Schaumburg, Illinois 60173
Phone: 847.517.1200
Fax: 847.517.1206
info@crsi.org

Refer to the CRSI website for staff directory and regional office locations/contacts.



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 Reinforcing Detailing/Fabrication/ConstructionPage 14

Design of Reinforced Concrete Structures



CRSI Design Handbook

2002, 9th Edition

648 pp. + 350 pages on CD-ROM

The Industry Reference Book for:

- Structural Engineers
- Civil Engineers
- Contractors
- Estimators
- Architects



CONTINUING AN ENDURING LEGACY

A "Must Have" Design Resource

- Great for preliminary design
- Save time in building design
- Minimize calculations
- Assists in design code compliance
- Get quick material quantity estimates to compare alternative building designs

The *CRSI Design Handbook 2002* has been the reference book for cast-in-place reinforced concrete design since 1952. This new 9th edition provides the necessary information needed for common reinforced concrete structural elements such as columns, beams, footings, pile caps, retaining walls, and floor systems.

Code 10HB \$105 Member Price: \$65

CRSI DESIGN HANDBOOK 2002 TABLE OF CONTENTS

- Basis and Use of Tables
- Strength Design of Columns
- Square and Rectangular Columns
- Round-Tied Columns
- Strength Design of Flexural Members and Development and Splice Design Data for Reinforcing Bars
- Serviceability Checks – Flexural Members
- One-Way Slabs
- One-Way Concrete Joist Construction
- Solid Two-Way Flat Plates – Square Panels
- Two-Way Solid Flat Slabs – Square Panels with Drops
- Waffle Flat Slabs – Square Panels
- Beams
- Spread Footings, Pile Caps and Drilled Piers
- Cantilevered Retaining Walls

Manual of Standard Practice

2001, 27th Edition, 116 pp.

Presenting the Industry Standards for Reinforced Concrete Construction Since 1927 for:

- Architects
- Engineers
- Contractors
- Estimators
- Detailers
- Fabricators
- Inspectors

The *Manual of Standard Practice* has been presenting the standards of the reinforcing steel industry since 1927. This 27th edition contains updated information on recommended industry practices for estimating, detailing, fabricating, and placing reinforcing



steel for concrete construction. Excellent resource for preparing requirements in project specifications. Every architect, engineering firm, construction company and inspection office that is involved with reinforced concrete should own a copy.

Code 10MSP \$39 Member Price: \$18

Ready Reference Guide

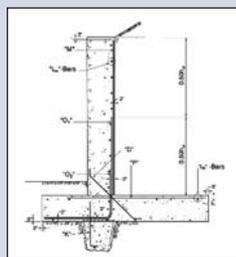
This new resource guide contains valuable information about reinforced concrete structural systems, along with good references information on reinforcing steel bars and accessories used in concrete construction. CRSI technical products are shown, and CRSI member companies are listed for each state so the construction industry can find suppliers of quality product used in reinforced concrete construction.



Code 30RR \$15 Member Price: \$5

CRSI Retaining Wall Program

- Table generating mode and a fixed geometry mode, allow easy adaptation to your design requirements
- Optimizes geometry and steel reinforcement
- Black (uncoated) or epoxy-coated steel reinforcing
- Based on ACI 318 and AASHTO LRFD



See www.crsi.org for Free Demonstration Program

CRSI Retaining Wall Program is a Windows® program which provides the designer with optimized solutions for reinforced concrete retaining walls. The program allows the user to

designate either ACI 318 or AASHTO LRFD design codes, with the option of a tabular – multiple heights – output or a single fixed geometry output.

Code 50RETWALL **\$395** Member Price: \$325

Reinforcement Anchorages and Splices

1997, 4th Edition, 100 pp.



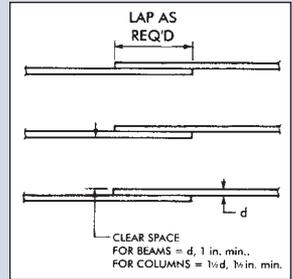
The definitive source for information on development and splicing of reinforcing bars. Includes extensive tables of tension development and lap splice lengths for Grade 60 rebars with 3,000

to 8,000 psi concrete compressive strengths, and development and lap splice tables for epoxy-coated reinforcing bars. Based on ACI 318-95.

Code 10SPLBK **\$48** Member Price: \$18

Devlap3.0 – Development and Lap Splice Lengths For Reinforcing Bars

This software calculates development and lap splice lengths for reinforcing bars. Generates tables or will consider specific cases. Based on ACI 318 as well as AASHTO specifications. DOS based.



Code 50DEVLAP \$60 Member Price: \$28

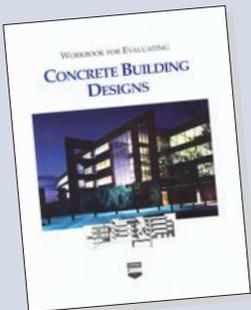
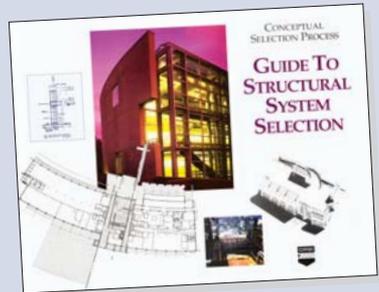
Conceptual Design Resource Package

Guidebook and Workbook – This package will help designers, architects and owners in the early conceptual

stage of planning and cost estimating for reinforced concrete structures.

- **Guide to Structural System Selection** – 1997, 46 pp.

Designed to aid in the consideration of all factors necessary to confidently determine selection of a structural system. Covers criteria development, structure requirements, owner’s desires, and potential constraints.



- **Workbook for Evaluating Concrete Building Designs** – 1997, 2nd Edition, 80 pp.

An easy-to-use resource for confirming the selection of reinforced concrete construction for any design. Quickly helps to evaluate cost of reinforced concrete structures to assist in early-stage construction decision making.

Code 30CSPPKG \$60 Member Price: \$28

CRSI Handbook Programs

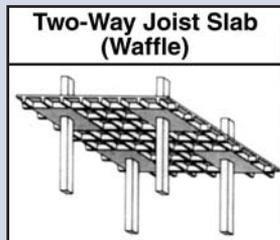
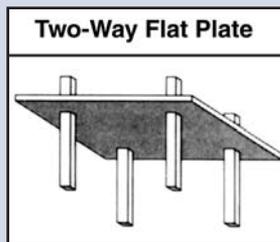
Set of nine computer programs based on the ACI 318-95 Building Code. These programs are direct adaptations of the programs used to prepare the tabulated designs in the *CRSI Design Handbook*, but with added features including: use of other concrete com-

pressive strengths and minimum yield strengths of reinforcing bars; use of other dimensions of elements other than those tabulated; extended ranges of input and design options. DOS based CD-ROM.

The Industry Reference Software and Manuals included on CD-ROM:

- Reinforced Concrete Columns
- One-Way Solid Slabs
- One-Way Joists
- Two-Way Flat Plates
- Two-Way Flat Slabs
- Two-Way Joist (Waffle) Slabs
- Reinforced Concrete Beams
- Square Footings
- Pile Caps

*Updated
to ACI 2005
Standards
(Coming Dec. 2005)*



PRE-RELEASE PRICE

Code 50HBCOMBO ~~\$680~~ **\$480** Member Price: ~~\$280~~ \$200

(Product billed on shipment)

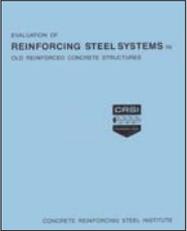
Reinforced Concrete Fire Resistance



256 pp. A must for structural engineers, architects, municipal and state building departments, and building code personnel. Analytical methods for prediction of structural fire ratings of buildings in fires, considering value of cast-in-place restraints. Practical step-by-step examples from start of fire to structural fire rating. Full description of 71 fire tests of reinforced concrete flexural members.

Code 10FIRE **\$35** Member Price: \$12

Evaluation of Reinforcing Steel Systems In Old Reinforced Concrete Structures



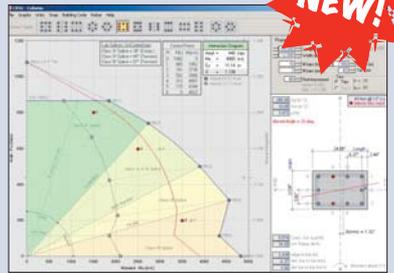
20 pp. Starting point for evaluating load capacity when complete original design documents are not available. Obsolete patented systems most popular in 1910-1930 are shown in detail – in two colors where necessary.

Code 10RSS \$16 Member Price: \$8

Advanced Column Program

Make choices in column sizes, materials and reinforcing...see results instantly on screen. Displays P/M interaction diagram which changes when you check preliminary sizes or reinforcing. It uniquely displays the moment magnification for slender columns and reflects it in the applied loads.

Not available on Web – Call or Email.



Code 50ADVCOL \$700 Member Price: \$650

Advanced Retaining Wall Program

- Everything is contained on one screen.
- The graphic drawing is 'to scale' and changes instantly with input changes.
- Uses ACI 318-99 or 318-02.
- One-page output to include in design notes.

Not available on Web – Call or Email.



Code 50ADVWAL \$450 Member Price: \$400

CRC Highway Pave and CRC Airpave

*Combo
Software*



CRC-HIGHWAY PAVE and CRC-AIRPAVE are now available in a CD-ROM package. CRC-HIGHWAY PAVE is a tool for the design and analysis of continuously reinforced concrete pavement for highways and roads. CRC-AIRPAVE is a tool for the design and analysis of continuously reinforced concrete pavement for airports and industrial pavement, such as intermodal terminals.

CRC-HIGHWAY PAVE models concrete and reinforcing steel stresses, and crack widths and spacings, while optimizing reinforcing steel based on material properties and construction consider-

ations. Inputs include truck axle configurations and tire pressures.

CRC-AIRPAVE includes similar models as CRC-HIGHWAY PAVE for concrete and reinforcing steel stresses. It allows loading inputs not only for standard aircraft or special gear configurations, but also for cranes and straddle carriers typically found at ports and freight intermodal terminals.

CRC-HIGHWAY PAVE and CRC-AIRPAVE are DOS based. The software package comes with detailed manuals on design concepts and methodologies for each program.

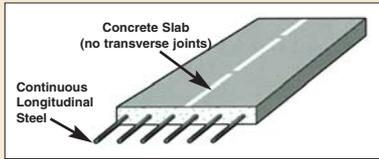
Both Software Programs in One Package

HIGHWAY PAVE and AIRPAVE

Code 50CRCCOM **\$125** Member Price: \$55

CRCP – Continuously Reinforced Concrete Pavement

Roads for this generation and the next, CRCP is concrete pavement with continuous steel reinforcing bars throughout its length. Its design eliminates the need for transverse joints resulting in a continuous, smooth-riding surface.



- Stands up to heavy traffic loads
- Minimizes maintenance
- Long lasting
- Stays smooth longer
- Withstands harsh environmental conditions

CRCP CD-ROM

CD-ROM contains all of CRSI's resources for the continuously reinforced concrete pavement industry, including research reports, technical bulletins, case histories, references, and a Microsoft PowerPoint® presentation on CRCP.

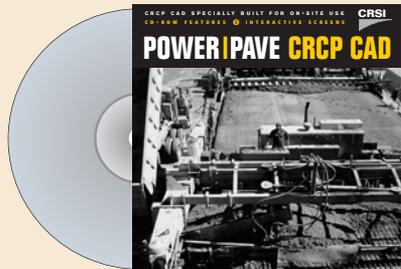


Code 30CRPCD **\$39** Members: \$20

PowerPave CD-ROM

A software analysis tool that predicts early-age performance of continuously reinforced concrete pavement (CRCP). The analysis is based on both design assumptions (such as material quantities and types) and construction assumptions (such as environmental factors and construction methods).

With nine interactive screens, PowerPave can help optimize CRCP options to reduce risk, control costs, and maximize investment. Included with PowerPave software is a "White



Paper" that discusses PowerPave operations, inputs and outputs, and the technical models and methodologies. Windows® 95/98/NT/2000 compatible.

Code 50CRPCAD **\$320** Member Price: \$165

Workbook for Short-Span Reinforced Concrete Slab Bridges

New 60-page workbook and CD provides cost-saving information to help select the cast-in-place slab bridge that is both affordable and functional, invaluable material for bridge eng-

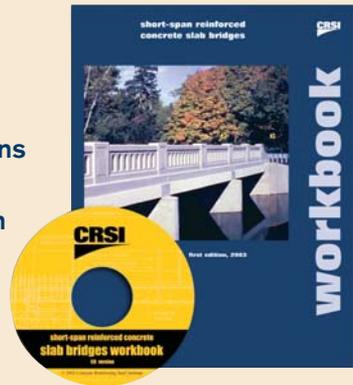
ineers considering cast-in-place reinforced concrete slab bridges, one of the most widely-used bridge types in North America.

The Workbook contains:

- A discussion on design, construction, and economics, including worksheets and information to make direct cost comparisons with other bridge types
- Tables of material quantities for many span lengths and arrangements
- Example bridge type and size selection

The CD-ROM contains:

- The workbook in PDF format
- Spreadsheet templates, and supplemental material, including a PowerPoint presentation on design and construction



See www.crsi.org for information on how to use the Workbook

Workbook & CD-ROM - Code 30SSBW **\$50** Member Price: \$25

CD-ROM Only - Code 30SSBC **\$40** Member Price: \$20

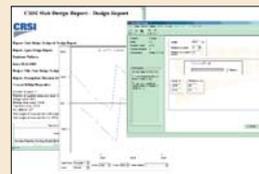
Slab Bridge Designer 2.0

Design of Continuous Reinforced Concrete Slab Bridges



New Features and Functions:

Slab Bridge Designer 2.0 analyzes LFD and LRFD designs for continuous steel reinforced concrete bridge slabs. AASHTO will require LRFD by 2006 — use this software for new and legacy designs!



Code 50SLABBRDG 2.0 **\$350** Member Price: \$250

Since its first use in 1973, epoxy-coated reinforcing bars have become the primary corrosion-protection system for many state departments of transportation. The low initial cost and documented performance of epoxy-coated reinforcement has made it a sound value and a proven corrosion-protection strategy.

An excerpt from the report, "Corrosion Protection: Concrete Bridges"^①, from the Federal Highway Administration (FHWA), states:

"The preferred primary corrosion-protection system in many states has been fusion-bonded epoxy-coated rebars (ECR), which have been used in approximately 20,000 reinforced concrete bridge decks. This rebar has performed very well in alleviating the problem of corrosion-induced deterioration of concrete bridge decks. It is estimated that its use in the last 25 years has saved the taxpayers billions of dollars so far."

Since its inception over ten years ago, the voluntary Epoxy Coating Plant



Certification Program has grown to include over 33 plants in the U.S. and Canada, with five new member plants coming aboard in the past year.

Interest in the voluntary program continues to grow because many transportation agencies, including 19 state and provincial agencies, will only use epoxy-coated reinforcing bars produced by CRSI Certified Plants. In addition, the program has helped raise the product quality standard. This has resulted in an improved product that is the preferred choice to combat corrosion of steel reinforcement. For a quality product with a proven record of performance, use epoxy-coated steel reinforcement from a CRSI Certified Plant.

Visit our web site at www.crsi.org for a list of the CRSI certified plants and additional information about epoxy-coated reinforcing bars.



① FHWA-RD-98-088 Sept.1998

Epoxy-Coated Rebar CD-ROM

Easy to use CD-ROM package of resource materials on the number one corrosion-protection system for reinforcing steel, **epoxy-coatings**. Guidebooks, videos, research reports, and other materials cover specifications, field handling techniques, fabrication, CRSI's Epoxy Coating Plant Certification Program, and more.



Code 30ECRCD \$10 Members: Free

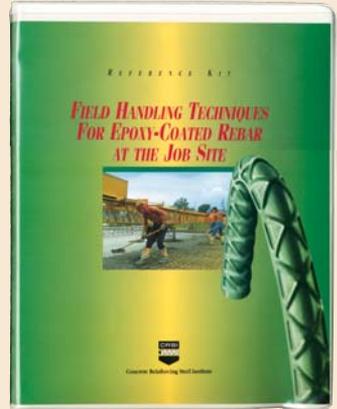
Field Handling Techniques for Epoxy-Coated Rebar

Reference Guide and Video, 1996

This 12-page guide and 8-minute video provides information about the various aspects of field handling of epoxy-coated rebar at the job site.

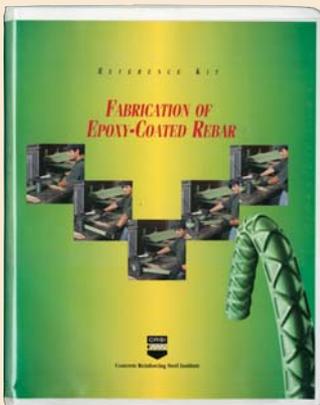
The guide and video cover:

- Receipt of material, inspection, truck unloading, job-site handling and storage.
- Placing of rebar, use of bar supports and tie wires, lap and mechanical splicing, and guidelines for field cutting.
- Final inspection and step-by-step directions for repairing damaged epoxy coating.



Guide and Video Package

Code 10ECRPKG **\$40** Member Price: \$15



Fabrication of Epoxy-Coated Rebar

Reference Guide and Video, 1996

This 12-page guide and 8-minute video outline the recommended practices for fabrication of epoxy-coated rebar. Information is included about material receipt at the plant, storage, fabrication, shearing, bending, repair, and handling procedures.

Guide and Video Package

Code 10ECFABPKG **\$40** Member Price: \$15

Field Inspection of Reinforcing Bars

1998, 25-Minute Video

This video presents an overview of the placing of reinforcing bars. Topics include the criteria and code governing construction, bar sizes and grade markings, mill test reports, fabrication, placing and concrete cover tolerances, and splicing. References are given to publications where in-depth information about these topics are available.

It is recommended viewers purchase CRSI's *Manual of Standard Practice* (see page 4) to reference topics that are shown in the video.



Now available on CD-ROM

Code 10FIRV (VHS Tape) \$39 Member Price: \$20

Code 10FIRCD (CD-ROM) \$39 Member Price: \$20

Placing Reinforcing Bars, 8th Edition (2005)



This unique and popular book presents the best accepted current practices in placing reinforcing bars. It is written for apprentices, journeymen ironworkers, and inspectors. Definitive resource for preparing provisions in project specifications. Eighteen heavily illustrated chapters cover: materials, handling bars at the jobsite, general principles for bar placing, splicing, and tying; placing bars in footings, walls, columns, floors, roofs, pavements and highway structures; and coated reinforcing bars.

Code 10PLACE \$40 Member Price: \$20

Bar Cards (3 Separate Cards)

Two separate designer cards show ASTM standard bar sizes, diameters, areas and weights, along with hook details. Also shows minimum yield and minimum tensile requirements per ASTM. One card is metric and one card

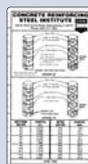
is in inch-pound units. Bar Marking Card shows the industry standard markings on reinforcing steel bars. One side describes metric markings and the other side describes inch-pound markings. Each card sold separately in sets of 10.

Code 30BCARD – Designers Cards (in.-lb)

Code 30BCARDM – Designers Cards (metric)

Code 30BMARKC – Bar Marking Cards

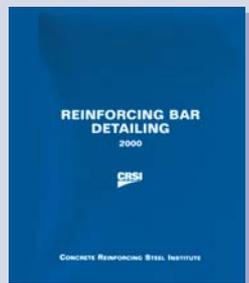
Sold Each \$1 Member Price: Free



Reinforcing Bar Detailing

2000, 4th Edition

- The definitive guide for detailing of reinforcing bars.
- Instructs the Detailer in preparation of placing drawings, and bar lists used in bending and cutting reinforcing bars.
- Introduces basic, accepted practices covering fundamentals and applications of rebar detailing.

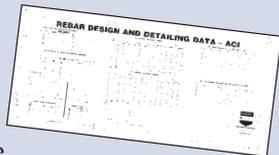


This heavily illustrated book covers materials, specifications, placing drawings, current detailing practices, and computer estimating and detailing. For industrial on-the-job training programs as well as colleges, technical and vocational schools.

Code 10DET **\$175** Member Price: \$40

Design & Detailing Data Chart

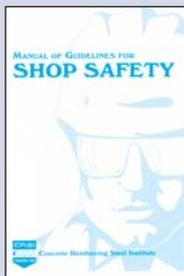
11" x 24" desk chart showing standard hook details, development, and lap splice lengths. The blue side shows the ASTM standard metric reinforcing bars. The white side shows data in inch-pound units. In conformance with ACI 318 and AASHTO.



Code 30BCHRTD **\$15** Member Price: \$8

Manual of Guidelines for Shop Safety

Pocket guide with safety tips for all fabrication and construction employees. Covers safety rules, material handling equipment, shears, bending, punch presses and much more. Available in both English and Spanish. 54 pages.



English Edition – Code 30SSM **\$10** Member Price: FREE

Spanish Edition – Code 30SSMSP **\$10** Member Price: FREE



Computer-based Detailer Training Program

A new computer-based training program to help CRSI fabricator members attract, train, and retain efficient rebar detailers.

The DVD-ROM program contains 12 chapters, including:

- 1,000 total screens
- 1,300 narrations (6-8 hrs.)
- 1,200 graphics
- 60 workbook exercises
- 82 animations
- 9 animated 3-D fly-throughs
- 8 full screen videos
- 20 stories



Code DVDETRRG \$4,995 Member Price: \$4,195

Not available online. Please call 800-328-6306 to order.

Audio/Visual Detailer Training Program



Training program for detailing of rebar in concrete. Includes audio cassettes, workbook, administration manual, master script of audio cassettes, related architectural and engineering drawings, quizzes, and final exam problem. Detailing book 10DET is required, order separately.

Code 10DETPRG \$1,500 Member Price: \$375

Extra Workbook – Code 10DETWKB \$45 Member Price: \$25

Extra Drawing Set – Code 10DETRDG \$99 Member Price: \$66



CRSI Presents: Introduction to the Concrete Reinforcing Steel Industry

Introduction to the dynamic business of reinforced concrete construction. It is highly recommended for anyone who is new to the reinforcing industry—working in virtually any capacity from administrative support to rebar placement on the job.

- Introduction to the concrete reinforcing steel industry
- Learn about the process of designing and building a reinforced concrete project, the key people involved, the roles they play in the process, and the documents they produce
- Learn about the types of structures that can be built using steel reinforced concrete, and the physical properties of unreinforced and reinforced concrete
- Become familiar with industry terms and publications



Code INTRO \$995 Member Price: \$595

Not available online. Please call 800-328-6306 to order.