

# INDEX

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**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 4.3, 12.1

**441R**—High-Strength Concrete Columns, 3.2.1

**506.1R**—Guide to Fiber-Reinforced Shotcrete, 6.3.1.1, 7.2

**506.5R**—Guide for Specifying Underground Shotcrete, 8.6

**523.1R**—Guide for Cast-in-Place Low-Density Cellular Concrete, 3.3

**523.2R**—Guide for Precast Cellular Concrete Floor, Roof, and Wall Units, 3.1

**523.4R**—Guide for Design and Construction with Autoclaved Aerated Concrete Panels, 7.1.1, 7.1.3.4

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**549R**—Report on Ferrocement, 4.2.2

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**126.3R**—Guide to a Recommended Format for Concrete in a Materials Property Database

### ***Concrete block***

**530**—Building Code Requirements for Masonry Structures

**530.1**—Specification for Masonry Structures

### ***Concrete brick***

**530**—Building Code Requirements for Masonry Structures

**530.1**—Specification for Masonry Structures

### ***Concrete construction, see Construction***

### ***Concrete design, see Design factors***

### ***Concrete durability, see Durability***

### ***Concrete equipment, see Equipment***

### ***Concrete parking lots, see Parking lots***

### ***Concrete paving***

**325.11R**—Accelerated Techniques for Concrete Paving

**325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads

### ***Concrete slabs, see Slabs***

### ***Conduits, embedded***

**229R**—Controlled Low-Strength Materials, 2.6

**318**—Building Code Requirements for Structural Concrete, 6.3

**350**—Code Requirements for Environmental Engineering Concrete Structures, 6.3

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**318**—Building Code Requirements for Structural Concrete

**352.1R**—Recommendations for Design of Slab-Column Connections in Monolithic Reinforced Concrete Structures

**439.3R**—Types of Mechanical Splices for Reinforcing Bars

**550.1R**—Guide to Emulating Cast-in-Place Detailing for Seismic Design of Precast Concrete Structures, Ch. 4

**551.1R**—Tilt-Up Concrete Construction Guide, Ch. 7

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 7.9

**350**—Code Requirements for Environmental Engineering Concrete Structures, 7.9, 16.6

**357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 2.17, 6.13

**533R**—Guide for Precast Concrete Wall Panels, 2.6

### ***Connections, mechanical***

**355.2**—Qualification of Post-Installed Mechanical Anchors in Concrete

**439.3R**—Types of Mechanical Splices for Reinforcing Bars

### ***Connectors, see Anchorage to concrete***

### ***Consistency tests, see also Mixture proportioning***

**211.3R**—Guide for Selecting Proportions for No-Slump Concrete, 2.2

**223R**—Guide for the Use of Shrinkage-Compensating Concrete, 6.4

**229R**—Controlled Low-Strength Materials, 7.3

**325.10R**—Report on Roller-Compacted Concrete Pavements, 4.2

**325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, 2.2

**351.1R**—Grouting between Foundations and Bases for Support of Equipment and Machinery, 7.1

**544.3R**—Guide for Specifying, Proportioning, and Production of Fiber-Reinforced Concrete, 4.2

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**304R**—Guide for Measuring, Mixing, Transporting, and Placing Concrete

**304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing

**309R**—Guide for Consolidation of Concrete

**309.1R**—Report on Behavior of Fresh Concrete During Vibration

**309.2R**—Identification and Control of Visible Effects of Consolidation on Formed Concrete Surfaces

**SP-15**—Field Reference Manual: Standard Specification for Structural Concrete ACI 301-10 with Selected ACI References

**302.1R**—Guide for Concrete Floor and Slab Construction, Ch. 8

**303R**—Guide to Cast-in-Place Architectural Concrete Practice, Ch. 7

**ITG-4.2R**—Materials and Quality Considerations for High-Strength Concrete in Moderate to High Seismic Applications, Ch. 13, 7.9

**201.2R**—Guide to Durable Concrete, 3.4

**214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results, 3.2

- 222.3R**—Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures, 4.3
- 301**—Specifications for Structural Concrete, 5.3, 6.3, 7.3
- 325.10R**—Report on Roller-Compacted Concrete Pavements, 7.5
- 336.2R**—Suggested Analysis and Design Procedures for Combined Footings and Mats, 6.8
- 345R**—Guide for Concrete Highway Bridge Deck Construction, 9.5
- 362.1R**—Guide for the Design of Durable Parking Structures, 4.6

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- 121R**—Guide for Concrete Construction Quality Systems in Conformance with ISO 9001
- 224.3R**—Joints in Concrete Construction
- 302.1R**—Guide for Concrete Floor and Slab Construction
- 305R**—Guide to Hot Weather Concreting
- 306.1**—Standard Specification for Cold Weather Concreting
- 318**—Building Code Requirements for Structural Concrete
- 330R**—Guide for the Design and Construction of Concrete Parking Lots
- 332.1R**—Guide to Residential Concrete Construction
- 336.1**—Specification for the Construction of Drilled Piers
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures
- 440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars
- 440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures
- 440.5**—Specification for Construction with Fiber-Reinforced Polymer Reinforcing Bars
- 440.6**—Specification for Carbon and Glass Fiber-Reinforced Polymer Bar Materials for Concrete Reinforcement
- 523.4R**—Guide for Design and Construction with Autoclaved Aerated Concrete Panels
- 530**—Building Code Requirements for Masonry Structures
- 530.1**—Specification for Masonry Structures
- ITG-7**—Specification for Tolerances for Precast Concrete

- 222.3R**—Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures, Ch. 4
- 307**—Code Requirements for Reinforced Concrete Chimneys, Ch. 3
- 325.11R**—Accelerated Techniques for Concrete Paving, Ch. 5
- 345R**—Guide for Concrete Highway Bridge Deck Construction, Ch. 4
- 345.2R**—Guide for Widening Highway Bridges, Ch. 3
- 350**—Code Requirements for Environmental Engineering Concrete Structures, Part 3, 19.5, G.4
- 351.3R**—Foundations for Dynamic Equipment, Ch. 5
- 357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, Ch. 6
- 358.1R**—Analysis and Design of Reinforced and Prestressed Concrete Guideway Structures, Ch. 2
- 371R**—Guide for the Analysis, Design, and Construction of Elevated Concrete and Composite Steel-Concrete Water Storage Tanks, Ch. 4
- 372R**—Design and Construction of Circular Wire- and Strand-Wrapped Prestressed Concrete Structures, Ch. 4
- 373R**—Design and Construction of Circular Prestressed Concrete Structures with Circumferential Tendons, Ch. 4
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- 549R**—Report on Ferrocement, Ch. 3
- 551.1R**—Tilt-Up Concrete Construction Guide, Ch. 6
- 336.3R**—Design and Construction of Drilled Piers, 5.3, 5.7, 5.9
- 341.2R**—Seismic Analysis and Design of Concrete Bridge Systems, 5.5
- 548.3R**—Report on Polymer-Modified Concrete, 4.1.5, 4.3.8,
- 549.1R**—Guide for the Design, Construction, and Repair of Ferrocement, 5.2

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- 224.3R**—Joints in Concrete Construction
- 325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, Ch. 4
- 318**—Building Code Requirements for Structural Concrete, 6.4
- 325.10R**—Report on Roller-Compacted Concrete Pavements, 7.6
- 346**—Specification for Cast-in-Place Concrete Pipe, 3.2
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 6.4
- 350**—Code Requirements for Environmental Engineering Concrete Structures, 6.4
- 351.2R**—Report on Foundations for Static Equipment, 6.4
- 351.3R**—Foundations for Dynamic Equipment, 5.4
- 357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 6.3
- 376**—Code Requirements for Design and Construction of Concrete Structures for the Containment of Refrigerated Liquefied Gases, 11.7
- 423.3R**—Recommendations for Concrete Members Prestressed with Unbonded Tendons, 5.1

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- 347.2R**—Guide for Shoring/Reshoring of Concrete Multistory Buildings, Ch. 3
- 334.3R**—Construction of Concrete Shells Using Inflated Forms, 3.15
- 551.1R**—Tilt-Up Concrete Construction Guide, 4.1

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- 117**—Specifications for Tolerances for Concrete Construction and Materials
- 301**—Specifications for Structural Concrete
- 303.1**—Standard Specification for Cast-in-Place Architectural Concrete
- 306.1**—Standard Specification for Cold Weather Concreting
- 308.1**—Specification for Curing Concrete
- 330.1**—Specification for Unreinforced Concrete Parking Lots
- 336.1**—Specification for the Construction of Drilled Piers
- 346**—Specification for Cast-in-Place Concrete Pipe
- 423.7**—Specification for Unbonded Single-Strand Tendon Materials
- 503.1**—Standard Specification for Bonding Hardened Concrete Steel, Wood, Brick, and Other Materials to Hardened Concrete with a Multi-Component Epoxy Adhesive

- 503.2**—Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive
- 503.3**—Specification for Producing a Skid-Resistant Surface on Concrete by the Use of Epoxy and Aggregate
- 503.4**—Standard Specification for Repairing Concrete with Epoxy Mortars
- 506.2**—Specification for Shotcrete
- 530.1**—Specification for Masonry Structures
- 548.4**—Standard Specification for Latex-Modified Concrete (LMC) Overlays

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- 350.2R**—Concrete Structures for Containment of Hazardous Materials
- 359**—Code for Concrete Containments
- 372R**—Design and Construction of Circular Wire- and Strand-Wrapped Prestressed Concrete Structures, Ch. 5
- 373R**—Design and Construction of Circular Prestressed Concrete Structures with Circumferential Tendons, Ch. 5
- 357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 4.5.3

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### ***Contraction joints, see also Joints, movement***

- 224.3R**—Joints in Concrete Construction
- 207.5R**—Report on Roller-Compacted Mass Concrete, 5.6
- 216.1**—Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, 2.2.7, 3.3.3, 4.6
- 318**—Building Code Requirements for Structural Concrete, 22.3
- 325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, 4.4
- 360R**—Guide to Design of Slabs-on-Ground, 13.14
- 544.3R**—Guide for Specifying, Proportioning, and Production of Fiber-Reinforced Concrete, 7.7

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- 533.1R**—Design Responsibility for Architectural Precast-Concrete Projects
- 301**—Specifications for Structural Concrete, 1.6.3
- 311.4R**—Guide for Concrete Inspection, 2.5
- 440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 6.1

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- 229R**—Controlled Low-Strength Materials
- SP-15**—Field Reference Manual: Standard Specification for Structural Concrete ACI 301-10 with Selected ACI References
- 232.1R**—Use of Raw or Processed Natural Pozzolans in Concrete, 6.2
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- 304.4R**—Placing Concrete with Belt Conveyors
- 304R**—Guide for Measuring, Mixing, Transporting, and Placing Concrete, Ch. 10
- 207.5R**—Report on Roller-Compacted Mass Concrete, 5.4
- 301**—Specifications for Structural Concrete, 5.1, 6.1, 7.1, 9.1
- 318**—Building Code Requirements for Structural Concrete, 5.9
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 5.9
- 350**—Code Requirements for Environmental Engineering Concrete Structures, 5.8

### ***Cooling***

- 207.4R**—Cooling and Insulating Systems for Mass Concrete, Ch. 2, Ch. 3
- 207.1R**—Guide to Mass Concrete, 4.7
- 305R**—Guide to Hot Weather Concreting, 3.2

### ***Cooling system***

- 207.4R**—Cooling and Insulating Systems for Mass Concrete

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- 117**—Specifications for Tolerances for Concrete Construction and Materials, Sec. 13

### ***Corbels, shear design, see also Shear strength***

- 445R**—Recent Approaches to Shear Design of Structural Concrete, Ch. 6
- 318**—Building Code Requirements for Structural Concrete, 11.8
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 11.9
- 350**—Code Requirements for Environmental Engineering Concrete Structures, 11.9
- 530**—Building Code Requirements for Masonry Structures, 1.12

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- 214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results
- 224.1R**—Causes, Evaluation, and Repair of Cracks in Concrete Structures, 2.2
- 349.3R**—Evaluation of Existing Nuclear Safety-Related Concrete Structures, 3.5
- 364.1R**—Guide for Evaluation of Concrete Structures before Rehabilitation, 5.5
- 437R**—Strength Evaluation of Existing Concrete Buildings, 3.1
- 506.4R**—Guide for the Evaluation of Shotcrete, 2.2

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- 543R**—Design, Manufacture, and Installation of Concrete Piles, 3.4, 5.4

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- 222R**—Protection of Metals in Concrete Against Corrosion
- 222.2R**—Corrosion of Prestressing Steels

**222.3R**—Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures  
**364.4T**—Determining the Load Capacity of a Structure When As-Built Drawings are Unavailable  
**364.6T**—Concrete Removal in Repairs Involving Corroded Reinforcing Steel  
**423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons  
**423.8R**—Report on Corrosion and Repair of Grouted Multistrand and Bar Tendon Systems  
  
**201.2R**—Guide to Durable Concrete, Ch. 7  
  
**225R**—Guide to the Selection and Use of Hydraulic Cements, 6.8  
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**234R**—Guide for the Use of Silica Fume in Concrete, 5.3  
**318**—Building Code Requirements for Structural Concrete, 18.16  
**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 6.2.3  
**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 4.4  
**350**—Code Requirements for Environmental Engineering Concrete Structures, 4.4, 18.16  
**423.3R**—Recommendations for Concrete Members Prestressed with Unbonded Tendons, 2.3  
**544.5R**—Report on the Physical Properties and Durability of Fiber-Reinforced Concrete, 4.5  
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**ITG-5.2**—Requirements for Design of a Special Unbonded Post-Tensioned Precast Shear Wall Satisfying ACI ITG-5.1, 3.7

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**318**—Building Code Requirements for Structural Concrete, 18.21  
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**439.4R**—Report on Steel Reinforcement—Material Properties and U.S. Availabilities, 3.7, 4.5, 5.7  
**440.3R**—Guide Test Methods for Fiber-Reinforced Polymers (FRPs) for Reinforcing or Strengthening Concrete Structures, B.3  
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**224.1R**—Causes, Evaluation, and Repair of Cracks in Concrete Structures, Ch. 1  
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**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.11  
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**207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete  
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**364.7T**—The Evaluation and Minimization of Bruising (Microcracking) in Concrete Repair  
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**503.5R**—Guide for the Selection of Polymer Adhesives with Concrete, Ch. 7

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- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.13
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- 224.2R**—Cracking of Concrete Members in Direct Tension
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- 355.2**—Qualification of Post-Installed Mechanical Anchors in Concrete, 8.6, A3.2
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- 506.1R**—Guide to Fiber-Reinforced Shotcrete, 7.6
- 524R**—Guide to Portland Cement-Based Plaster, 15.2
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- 209.2R**—Guide for Modeling and Calculating Shrinkage and Creep in Hardened Concrete
- 364.5T**—Importance of Modulus of Elasticity of Repair Materials
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**544.5R**—Report on the Physical Properties and Durability of Fiber-Reinforced Concrete

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**232.2R**—Use of Fly Ash in Concrete

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**334.1R**—Concrete Shell Structures Practice

**318**—Building Code Requirements for Structural Concrete, Ch. 19

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**336.2R**—Suggested Analysis and Design Procedures for Combined Footings and Mats

**318**—Building Code Requirements for Structural Concrete, Ch. 15, 22.7

**332**—Residential Code Requirements for Structural Concrete, Ch. 6, 1.3

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**341.3R**—Seismic Evaluation and Retrofit Techniques for Concrete Bridges, 4.4

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**334.3R**—Construction of Concrete Shells Using Inflated Forms

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**345R**—Guide for Concrete Highway Bridge Deck Construction, Ch. 5

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- 224.1R**—Causes, Evaluation, and Repair of Cracks in Concrete Structures
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- 440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars
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- 549.3R**—Report on Glass Fiber-Reinforced Concrete Premix
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**201.1R**—Guide for Conducting a Visual Inspection of Concrete in Service

**304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing

**311.1R**—ACI Manual of Concrete Inspection

**311.4R**—Guide for Concrete Inspection

**311.5**—Guide for Concrete Plant Inspection and Testing of Ready-Mixed Concrete

**350.1**—Specification for Tightness Testing of Environmental Engineering Concrete Structures

**533.1R**—Design Responsibility for Architectural Precast-Concrete Projects

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**210R**—Erosion of Concrete in Hydraulic Structures, Part 3

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**530.1**—Specification for Masonry Structures, Ch. 3

**533R**—Guide for Precast Concrete Wall Panels, Ch. 6

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- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.20
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- 548.4**—Standard Specification for Latex-Modified Concrete (LMC) Overlays
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- 548.4**—Standard Specification for Latex-Modified Concrete (LMC) Overlays
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- 230.1R**—Report on Soil Cement, 5.7

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- 350.2R**—Concrete Structures for Containment of Hazardous Materials, Ch. 7
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- 211.2**—Standard Practice for Selecting Proportions for Structural Lightweight Concrete
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**357.2R**—Report on Floating and Float-In Report on Barge-Like Concrete Structures

**546.2R**—Guide to Underwater Repair of Concrete

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**207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete

**207.3R**—Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions

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- 126.3R**—Guide to a Recommended Format for Concrete in a Materials Property Database

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- 336.2R**—Suggested Analysis and Design Procedures for Combined Footings and Mats

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- 234R**—Guide for the Use of Silica Fume in Concrete, Ch. 3
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- 304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing, Ch. 1

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- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures
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- 548.8**—Specification for Type EM (Epoxy Multi-Layer) Polymer Overlay for Bridge and Parking Garage Decks
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- 229R**—Controlled Low-Strength Materials
- 325.10R**—Report on Roller-Compacted Concrete Pavements
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**207.3R**—Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions

**221R**—Guide for Use of Normal Weight and Heavyweight Aggregates in Concrete

**221.1R**—Report on Alkali-Aggregate Reactivity

**349.3R**—Evaluation of Existing Nuclear Safety-Related Concrete Structures

**437R**—Strength Evaluation of Existing Concrete Buildings

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**550.1R**—Guide to Emulating Cast-in-Place Detailing for Seismic Design of Precast Concrete Structures

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**232.2R**—Use of Fly Ash in Concrete, Ch. 5

**304.1R**—Guide for the Use of Preplaced Aggregate Concrete for Structural and Mass Concrete Applications, Ch. 6, 5.1

**304.6R**—Guide for Use of Volumetric-Measuring and Continuous-Mixing Concrete Equipment, Ch. 6

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**357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 2.3

**362.1R**—Guide for the Design of Durable Parking Structures, 4.14

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**304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing  
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- 308R**—Guide to Curing Concrete, 3.4.4

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- 376**—Code Requirements for Design and Construction of Concrete Structures for the Containment of Refrigerated Liquefied Gases

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**222.3R**—Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures  
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**440R**—Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures  
**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars  
**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures  
**440.6**—Specification for Carbon and Glass Fiber-Reinforced Polymer Bar Materials for Concrete Reinforcement

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- 222R**—Protection of Metals in Concrete Against Corrosion  
**222.3R**—Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures

- 364.2T**—Increasing Shear Capacity Within Existing Reinforced Concrete Structures
- 364.4T**—Determining the Load Capacity of a Structure When As-Built Drawings are Unavailable
- 364.6T**—Concrete Removal in Repairs Involving Corroded Reinforcing Steel
- 408R**—Bond and Development of Straight Reinforcing Bars in Tension
- 408.2R**—Bond under Cyclic Loads
- 408.3R**—Guide for Lap Splice and Development Length of High Relative Rib Area Reinforcing Bars in Tension
- 421.1R**—Guide to Shear Reinforcement for Slabs
- 423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons
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- 309R**—Guide for Consolidation of Concrete, Ch. 18
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**224.3R**—Joints in Concrete Construction, Ch. 5

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**530**—Building Code Requirements for Masonry Structures  
**530.1**—Specification for Masonry Structures  
**548.8**—Specification for Type EM (Epoxy Multi-Layer) Polymer Overlay for Bridge and Parking Garage Decks  
**548.9**—Specification for Type ES (Epoxy Slurry) Polymer Overlay for Bridge and Parking Garage Decks  
**548.10**—Specification for Type MMS (Methyl Methacrylate Slurry) Polymer Overlays for Bridge and Parking Garage Decks  
**ITG-4.1**—Specification for High-Strength Concrete in Moderate to High Seismic Applications  
**ITG-7**—Specification for Tolerances for Precast Concrete  
**SP-15**—Field Reference Manual: Standard Specification for Structural Concrete ACI 301-10 with Selected ACI References

- 232.1R**—Use of Raw or Processed Natural Pozzolans in Concrete, Ch. 3  
**232.2R**—Use of Fly Ash in Concrete, Ch. 5  
**234R**—Guide for the Use of Silica Fume in Concrete, Ch. 7  
**439.3R**—Types of Mechanical Splices for Reinforcing Bars, Ch. 2

- 126.3R**—Guide to a Recommended Format for Concrete in a Materials Property Database, 11.2  
**213R**—Guide for Structural Lightweight-Aggregate Concrete, 5.13  
**233R**—Slag Cement in Concrete and Mortar, 1.8  
**303R**—Guide to Cast-in-Place Architectural Concrete Practice, 2.5  
**304.4R**—Placing Concrete with Belt Conveyors, 2.7  
**306R**—Guide to Cold Weather Concreting, 1.2  
**309.2R**—Identification and Control of Visible Effects of Consolidation on Formed Concrete Surfaces, 2.1  
**313**—Standard Practice for Design and Construction of Concrete Silos and Stacking Tubes for Storing Granular Materials, 1.4  
**325.11R**—Accelerated Techniques for Concrete Paving, 3.4  
**330R**—Guide for the Design and Construction of Concrete Parking Lots, 4.6  
**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 3.4  
**371R**—Guide for the Analysis, Design, and Construction of Elevated Concrete and Composite Steel-Concrete Water Storage Tanks, 1.3  
**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 14.2  
**440.7R**—Guide for the Design and Construction of Externally Bonded Fiber-Reinforced Polymer Systems for Strengthening Unreinforced Masonry, 12.2  
**548.3R**—Polymer-Modified Concrete, 3.5

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- 210R**—Erosion of Concrete in Hydraulic Structures  
**207.5R**—Report on Roller-Compacted Mass Concrete, 5.9

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**408.3R**—Guide for Lap Splice and Development Length of High Relative Rib Area Reinforcing Bars in Tension

**318**—Building Code Requirements for Structural Concrete, Ch. 12

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, Ch. 12

**350**—Code Requirements for Environmental Engineering Concrete Structures, Ch. 12

**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 6.8, 13.2

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**408.3R**—Guide for Lap Splice and Development Length of High Relative Rib Area Reinforcing Bars in Tension

**439.3R**—Types of Mechanical Splices for Reinforcing Bars

**318**—Building Code Requirements for Structural Concrete, Ch. 12

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, Ch. 12

**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars, Ch. 11

**550.1R**—Guide to Emulating Cast-in-Place Detailing for Seismic Design of Precast Concrete Structures, Ch. 5

**ITG-4.3R**—Report on Structural Design and Detailing for High-Strength Concrete in Moderate to High Seismic Applications, Ch. 7

**350**—Code Requirements for Environmental Engineering Concrete Structures, 12.14 through 12.19

**369R**—Guide for Seismic Rehabilitation of Existing Concrete Frame Buildings and Commentary

**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 6.8, 13.2

**530**—Building Code Requirements for Masonry Structures, 1.13

**543R**—Design, Manufacture, and Installation of Concrete Piles, 3.7

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**225R**—Guide to the Selection and Use of Hydraulic Cements

**357.2R**—Report on Floating and Float-In Concrete Structures

**530**—Building Code Requirements for Masonry Structures

**334.1R**—Concrete Shell Structures Practice, Ch. 5

**350.4R**—Design Considerations for Environmental Engineering Concrete Structures, Ch. 3

**207.5R**—Report on Roller-Compacted Mass Concrete, 5.4

**351.2R**—Report on Foundations for Static Equipment, 4.4

**357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 5.2, 6.2

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**313**—Standard Practice for Design and Construction of Concrete Silos and Stacking Tubes for Storing Granular Materials

***Static equipment***

**350.2R**—Concrete Structures for Containment of Hazardous Materials

**351.2R**—Report on Foundations for Static Equipment

***Statistical analysis***

**214R**—Guide to Evaluation of Strength Test Results of Concrete

**209.2R**—Guide for Modeling and Calculating Shrinkage and Creep in Hardened Concrete, App. B, 3.2

**214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results, Ch. 6, 7.3

**228.1R**—In-Place Methods to Estimate Concrete Strength, Ch. 3, 6.2

**363.2R**—Guide to Quality Control and Assurance of High-Strength Concrete, Ch. 6

**121R**—Guide for Concrete Construction Quality Systems in Conformance with ISO 9001, 8.4

**408R**—Bond and Development of Straight Reinforcing Bars in Tension, 4.5

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**308R**—Guide to Curing Concrete, 2.6, 2.7

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**ITG-6R**—Design Guide for the Use of ASTM A1035/A1035M Grade 100 (690) Steel Bars for Structural Concrete

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***Stiffness***

**318**—Building Code Requirements for Structural Concrete

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures

**351.1R**—Grouting between Foundations and Bases for Support of Equipment and Machinery

**530**—Building Code Requirements for Masonry Structures

**224.2R**—Cracking of Concrete Members in Direct Tension, 4.1

**350**—Code Requirements for Environmental Engineering Concrete Structures, 8.6

**351.2R**—Report on Foundations for Static Equipment, 4.3

**551.2R**—Design Guide for Tilt-Up Concrete Panels, 3.2

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**210R**—Erosion of Concrete in Hydraulic Structures, 3.2

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**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars, 9.3

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**304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing

**304R**—Guide for Measuring, Mixing, Transporting, and Placing Concrete, Ch. 2

**212.3R**—Report on Chemical Admixtures for Concrete, 4.10, 5.11, 6.10, 7.9, 8.9, 9.12, 10.9, 11.10, 12.9, 13.9, 14.7, 15.9, 16.7

**221R**—Guide for Use of Normal Weight and Heavyweight Aggregates in Concrete, 7.6

**232.1R**—Use of Raw or Processed Natural Pozzolans in Concrete, 4.1

**232.2R**—Use of Fly Ash in Concrete, 6.8

**233R**—Slag Cement in Concrete and Mortar, 2.1

**303.1**—Standard Specification for Cast-in-Place Architectural Concrete, 1.7

**304.6R**—Guide for Use of Volumetric-Measuring and Continuous-Mixing Concrete Equipment, 3.1

**318**—Building Code Requirements for Structural Concrete, 3.7

**330.1**—Specification for Unreinforced Concrete Parking Lots, 1.5

**364.3R**—Guide for Cementitious Repair Material Data Sheet, Ch. 6

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 3.7

**350**—Code Requirements for Environmental Engineering Concrete Structures, 3.7

**363R**—Report on High-Strength Concrete, 4.2.1

**423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons, 3.4

**423.7**—Specification for Unbonded Single-Strand Tendon Materials, 1.7

**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars, 6.1

**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 5.2

**440.5**—Specification for Construction with Fiber-Reinforced Polymer Reinforcing Bars, 1.5

**440.7R**—Guide for the Design and Construction of Externally Bonded Fiber-Reinforced Polymer Systems for Strengthening Unreinforced Masonry, 4.2

**503.1**—Standard Specification for Bonding Hardened Concrete Steel, Wood, Brick, and Other Materials to Hardened Concrete with a Multi-Component Epoxy Adhesive, 2.1.4

**503.2**—Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive, 2.1.4

**503.3**—Specification for Producing a Skid-Resistant Surface on Concrete by the Use of Epoxy and Aggregate, 1.7.2

**503.4**—Standard Specification for Repairing Concrete with Epoxy Mortars, 2.1.4

**503.7**—Specification for Crack Repair by Epoxy Injection, 1.6

**506R**—Guide to Shotcrete, 2.2

**506.2**—Specification for Shotcrete, 2.10

**523.1R**—Guide for Cast-in-Place Low-Density Cellular Concrete, 5.1

**533R**—Guide for Precast Concrete Wall Panels, 5.8, 6.3

**544.3R**—Guide for Specifying, Proportioning, and Production of Fiber-Reinforced Concrete, 3.4

**548.8**—Specification for Type EM (Epoxy Multi-Layer) Polymer Overlay for Bridge and Parking Garage Decks, 1.6

**548.9**—Specification for Type ES (Epoxy Slurry) Polymer Overlay for Bridge and Parking Garage Decks, 1.6

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**350.3**—Seismic Design of Liquid-Containing Concrete Structures

**549R**—Report on Ferrocement, 6.4

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**363R**—Report on High-Strength Concrete

**364.5T**—Importance of Modulus of Elasticity of Repair Materials

**435R**—Control of Deflection in Concrete Structures

**207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete, 3.7

**207.5R**—Report on Roller-Compacted Mass Concrete, 4.8

**224R**—Control of Cracking in Concrete Structures, 7.3

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**214R**—Guide to Evaluation of Strength Test Results of Concrete

**214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results

**221R**—Guide for Use of Normal Weight and Heavyweight Aggregates in Concrete

**225R**—Guide to the Selection and Use of Hydraulic Cements

**228.1R**—In-Place Methods to Estimate Concrete Strength

**318**—Building Code Requirements for Structural Concrete

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures

**351.1R**—Grouting between Foundations and Bases for Support of Equipment and Machinery

**352R**—Recommendations for Design of Beam-Column Connections in Monolithic Reinforced Concrete Structures

**358.1R**—Analysis and Design of Reinforced and Prestressed Concrete Guideway Structures

**437R**—Strength Evaluation of Existing Concrete Buildings

**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars

**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures

**549.1R**—Guide for the Design, Construction, and Repair of Ferrocement

**211.5R**—Guide for Submittal of Concrete Proportions, Ch. 4

**306R**—Guide to Cold Weather Concreting, Ch. 9

**325.10R**—Report on Roller-Compacted Concrete Pavements, Ch. 5

**350**—Code Requirements for Environmental Engineering Concrete Structures, Ch. 9, Ch. 20, 5.4, 10.17, 16.10, 19.3, D.4

**357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, Ch. 4

**207.1R**—Guide to Mass Concrete, 3.2

**207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete, 3.2

**207.5R**—Report on Roller-Compacted Mass Concrete, 4.2

**211.4R**—Guide for Selecting Proportions for High-Strength Concrete Using Portland Cement and Other Cementitious Materials, 2.2

- 213R**—Guide for Structural Lightweight-Aggregate Concrete, 4.10
- 233R**—Slag Cement in Concrete and Mortar, 5.1
- 308R**—Guide to Curing Concrete, 2.6
- 309R**—Guide for Consolidation of Concrete, 17.1
- 309.5R**—Compaction of Roller-Compacted Concrete, 3.2, 6.5
- 325.11R**—Accelerated Techniques for Concrete Paving, 7.1
- 325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, 2.2
- 330R**—Guide for the Design and Construction of Concrete Parking Lots, 4.2
- 346**—Specification for Cast-in-Place Concrete Pipe, 2.1
- 352.1R**—Recommendations for Design of Slab-Column Connections in Monolithic Reinforced Concrete Structures, 4.5
- 363R**—Report on High-Strength Concrete, 4.9, 5.6
- 371R**—Guide for the Analysis, Design, and Construction of Elevated Concrete and Composite Steel-Concrete Water Storage Tanks, 4.1.2.2.2
- 372R**—Design and Construction of Circular Wire- and Strand-Wrapped Prestressed Concrete Structures, 2.1
- 373R**—Design and Construction of Circular Prestressed Concrete Structures with Circumferential Tendons, 3.1
- 440R**—Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures, 6.1
- 549R**—Report on Ferrocement, 4.2, 4.3
- 555R**—Removal and Reuse of Hardened Concrete, 5.4
- ITG-5.2**—Requirements for Design of a Special Unbonded Post-Tensioned Precast Shear Wall Satisfying ACI ITG-5.1, 4.2

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- 318**—Building Code Requirements for Structural Concrete
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures
- 350**—Code Requirements for Environmental Engineering Concrete Structures
- 423.3R**—Recommendations for Concrete Members Prestressed with Unbonded Tendons
- T1.2**—Special Hybrid Moment Frames Composed of Discretely Jointed Precast and Post-Tensioned Concrete Members
- 213R**—Guide for Structural Lightweight-Aggregate Concrete, Ch. 5, 4.13
- 307**—Code Requirements for Reinforced Concrete Chimneys, Ch. 5
- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, Ch. 7
- 421.1R**—Guide to Shear Reinforcement for Slabs, Ch. 4
- 530**—Building Code Requirements for Masonry Structures, Ch. 3
- 336.3R**—Design and Construction of Drilled Piers, 3.3
- 440.4R**—Prestressing Concrete Structures with FRP Tendons, 3.2
- ITG-6R**—Design Guide for the Use of ASTM A1035/A1035M Grade 100 (690) Steel Bars for Structural Concrete, 4.11

### ***Strength of early-age concrete***

- 347.2R**—Guide for Shoring/Reshoring of Concrete Multistory Buildings, Ch. 4

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- 437R**—Strength Evaluation of Existing Concrete Buildings

- SP-15**—Field Reference Manual: Standard Specification for Structural Concrete ACI 301-10 with Selected ACI References

- 318**—Building Code Requirements for Structural Concrete, Ch. 20, 16.10
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures, Ch. 20, 16.10
- 350**—Code Requirements for Environmental Engineering Concrete Structures, Ch. 20, 16.10

- 214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results, 4.2

### ***Strengthening***

- 440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures
- 440R**—Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures, Ch. 8, 10.2, 10.3

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- 224.2R**—Cracking of Concrete Members in Direct Tension
- 318**—Building Code Requirements for Structural Concrete
- 351.2R**—Report on Foundations for Static Equipment
- 357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures
- 363R**—Report on High-Strength Concrete
- 364.5T**—Importance of Modulus of Elasticity of Repair Materials
- 408.2R**—Bond under Cyclic Loads
- 530**—Building Code Requirements for Masonry Structures
- 543R**—Design, Manufacture, and Installation of Concrete Piles
- 307**—Code Requirements for Reinforced Concrete Chimneys, Ch. 6
- 350.3**—Seismic Design of Liquid-Containing Concrete Structures, Ch. 6
- 207.3R**—Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions, 3.4
- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.5
- 347**—Guide to Formwork for Concrete, 2.3
- 358.1R**—Analysis and Design of Reinforced and Prestressed Concrete Guideway Structures, 5.3
- 423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons, 2.3
- 523.2R**—Guide for Precast Cellular Concrete Floor, Roof, and Wall Units, 4.3

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- 209R**—Prediction of Creep, Shrinkage, and Temperature Effects in Concrete Structures, 5.3, 5.4

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- 445R**—Recent Approaches to Shear Design of Structural Concrete, 2.3

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- 318**—Building Code Requirements for Structural Concrete

- 341.2R**—Seismic Analysis and Design of Concrete Bridge Systems
- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures
- 350**—Code Requirements for Environmental Engineering Concrete Structures
- 358.1R**—Analysis and Design of Reinforced and Prestressed Concrete Guideway Structures
- 530**—Building Code Requirements for Masonry Structures

- 336.2R**—Suggested Analysis and Design Procedures for Combined Footings and Mats, Ch. 3
- 371R**—Guide for the Analysis, Design, and Construction of Elevated Concrete and Composite Steel-Concrete Water Storage Tanks, Ch. 5
- 523.2R**—Guide for Precast Cellular Concrete Floor, Roof, and Wall Units, 4.1
- 550.1R**—Guide to Emulating Cast-in-Place Detailing for Seismic Design of Precast Concrete Structures, 3.3

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- 307**—Code Requirements for Reinforced Concrete Chimneys
- 318**—Building Code Requirements for Structural Concrete
- 330R**—Guide for the Design and Construction of Concrete Parking Lots
- 336.2R**—Suggested Analysis and Design Procedures for Combined Footings and Mats
- 336.3R**—Design and Construction of Drilled Piers
- 341.2R**—Seismic Analysis and Design of Concrete Bridge Systems
- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures
- 349.2R**—Guide to the Concrete Capacity Design (CCD) Method—Embedment Design Examples
- 350**—Code Requirements for Environmental Engineering Concrete Structures
- 350.1**—Specification for Tightness Testing of Environmental Engineering Concrete Structures
- 350.3**—Seismic Design of Liquid-Containing Concrete Structures
- 352.1R**—Recommendations for Design of Slab-Column Connections in Monolithic Reinforced Concrete Structures
- 357.2R**—Report on Floating and Float-In Concrete Structures
- 358.1R**—Analysis and Design of Reinforced and Prestressed Concrete Guideway Structures
- 360R**—Guide to Design of Slabs-on-Ground
- 362.1R**—Guide for the Design of Durable Parking Structures
- 423.3R**—Recommendations for Concrete Members Prestressed with Unbonded Tendons
- 530**—Building Code Requirements for Masonry Structures
- 544.4R**—Design Considerations for Steel Fiber-Reinforced Concrete
- 549.1R**—Guide for the Design, Construction, and Repair of Ferrocement

- 347**—Guide to Formwork for Concrete, Ch. 2
- 523.4R**—Guide for Design and Construction with Autoclaved Aerated Concrete Panels, Ch. 4

- 533.1R**—Design Responsibility for Architectural Precast-Concrete Projects, 2.2

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- 318**—Building Code Requirements for Structural Concrete, 21.11

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- 318**—Building Code Requirements for Structural Concrete, 7.13, 16.5
- 349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 7.13, 16.5
- 350**—Code Requirements for Environmental Engineering Concrete Structures, 7.13, 16.5
- 352.1R**—Recommendations for Design of Slab-Column Connections in Monolithic Reinforced Concrete Structures, 5.3

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- 209R**—Prediction of Creep, Shrinkage, and Temperature Effects in Concrete Structures, Ch. 3

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- 318**—Building Code Requirements for Structural Concrete, App. A
- 445R**—Recent Approaches to Shear Design of Structural Concrete, Ch. 6

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- 308R**—Guide to Curing Concrete, 3.4.5

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- 349.2R**—Guide to the Concrete Capacity Design (CCD) Method—Embedment Design Examples, App. A

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- 548.4**—Standard Specification for Latex-Modified Concrete (LMC) Overlays
- 548.3R**—Report on Polymer-Modified Concrete, 4.1
- 224R**—Control of Cracking in Concrete Structures, 6.3

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- 325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, 2.1
- 332**—Residential Code Requirements for Structural Concrete, 8.2



- 360R**—Guide to Design of Slabs-on-Ground, 3.3  
**522.1**—Specification for Pervious Concrete Pavement, 2.1, 3.2

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- 330R**—Guide for the Design and Construction of Concrete Parking Lots, App. B, 3.4, 5.2, 6.2
- 301**—Specifications for Structural Concrete, 5.3.1  
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**325.10R**—Report on Roller-Compacted Concrete Pavements, 7.2  
**325.12R**—Guide for Design of Jointed Concrete Pavements for Streets and Local Roads, 2.1  
**330.1**—Specification for Unreinforced Concrete Parking Lots, 3.1, 3.2  
**350**—Code Requirements for Environmental Engineering Concrete Structures, H.2  
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- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, Ch. 11, 12.4
- 345.1R**—Guide for Maintenance of Concrete Bridge Members, 3.5  
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- 343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 6.2.5, 6.3.3  
**351.2R**—Report on Foundations for Static Equipment, 6.1  
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- 201.2R**—Guide to Durable Concrete, 6.2, App. A  
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**233R**—Slag Cement in Concrete and Mortar, 5.9  
**234R**—Guide for the Use of Silica Fume in Concrete, 10.3

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- 318**—Building Code Requirements for Structural Concrete, 4.5  
**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 4.3  
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- 350.2R**—Concrete Structures for Containment of Hazardous Materials, 4.1

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- 341.2R**—Seismic Analysis and Design of Concrete Bridge Systems, 4.2, 4.3  
**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 6.5, 10.2, 10.3, 12.2  
**345.1R**—Guide for Maintenance of Concrete Bridge Members, 3.4

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- 201.1R**—Guide for Conducting a Visual Inspection of Concrete in Service  
**309.2R**—Identification and Control of Visible Effects of Consolidation on Formed Concrete Surfaces
- 302.1R**—Guide for Concrete Floor and Slab Construction, Ch. 11
- 308R**—Guide to Curing Concrete, 3.4.8  
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**345R**—Guide for Concrete Highway Bridge Deck Construction, 10.7  
**524R**—Guide to Portland Cement-Based Plaster, 15.5  
**533R**—Guide for Precast Concrete Wall Panels, 7.2  
**549.1R**—Guide for the Design, Construction, and Repair of Ferrocement, 6.2

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- 302.2R**—Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials, 9.6

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- 364.6T**—Concrete Removal in Repairs Involving Corroded Reinforcing Steel  
**364.7T**—The Evaluation and Minimization of Bruising (Microcracking) in Concrete Repair
- 548.5R**—Guide for Polymer Concrete Overlays, Ch. 4  
**555R**—Removal and Reuse of Hardened Concrete, Ch. 4
- 302.2R**—Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials, 9.8  
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**503.1**—Standard Specification for Bonding Hardened Concrete Steel, Wood, Brick, and Other Materials to Hardened Concrete with a Multi-Component Epoxy Adhesive, 2.3  
**503.3**—Specification for Producing a Skid-Resistant Surface on Concrete by the Use of Epoxy and Aggregate, 3.1  
**506R**—Guide to Shotcrete, 5.2  
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**546R**—Concrete Repair Guide, 2.3  
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**548.3R**—Report on Polymer-Modified Concrete, 4.3.2  
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- 201.1R**—Guide for Conducting a Visual Inspection of Concrete in Service
- 357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 7.2  
**437R**—Strength Evaluation of Existing Concrete Buildings, 2.2

### ***Sustainability***

- 231R**—Report on Early-Age Cracking: Causes, Measurement, and Mitigation

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**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures

**544.1R**—Report on Fiber-Reinforced Concrete, Ch. 4

**506.1R**—Guide to Fiber-Reinforced Shotcrete, 3.2

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**350.1**—Specification for Tightness Testing of Environmental Engineering Concrete Structures

**350.3**—Seismic Design of Liquid-Containing Concrete Structures

**371R**—Guide for the Analysis, Design, and Construction of Elevated Concrete and Composite Steel-Concrete Water Storage Tanks

**372R**—Design and Construction of Circular Wire- and Strand-Wrapped Prestressed Concrete Structures

**373R**—Design and Construction of Circular Prestressed Concrete Structures with Circumferential Tendons

**376**—Code Requirements for Design and Construction of Concrete Structures for the Containment of Refrigerated Liquefied Gases

**549R**—Report on Ferrocement, 6.4

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**318**—Building Code Requirements for Structural Concrete, 8.12

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 8.10

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**305R**—Guide to Hot Weather Concreting

**306R**—Guide to Cold Weather Concreting

**306.1**—Standard Specification for Cold Weather Concreting

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, App. E

**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars, Ch. 10, A.2

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**207.1R**—Guide to Mass Concrete, 1.3, 2.8, 4.7

**207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete, 4.3, 4.4, 4.5

**207.5R**—Report on Roller-Compacted Mass Concrete, 5.4

**238.1R**—Report on Measurements of Workability and Rheology of Fresh Concrete, 4.8

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**302.1R**—Guide for Concrete Floor and Slab Construction, 9.9

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**332.1R**—Guide to Residential Concrete Construction, 6.5, 6.6

**350**—Code Requirements for Environmental Engineering Concrete Structures, 7.12

**351.1R**—Grouting between Foundations and Bases for Support of Equipment and Machinery, 7.2

**435R**—Control of Deflection in Concrete Structures, 2.7

**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 4.2, 6.2

**440.7R**—Guide for the Design and Construction of Externally Bonded Fiber-Reinforced Polymer Systems for Strengthening Unreinforced Masonry, 5.2

**506.5R**—Guide for Specifying Underground Shotcrete, 6.2

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**209R**—Prediction of Creep, Shrinkage, and Temperature Effects in Concrete Structures

**216.1**—Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies, Ch. 1, Ch. 2

**551.2R**—Design Guide for Tilt-Up Concrete Panels, Ch. 5

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**440.1R**—Guide for the Design and Construction of Concrete Reinforced with FRP Bars, 3.4

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**423.3R**—Recommendations for Concrete Members Prestressed with Unbonded Tendons

**423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons

**423.7**—Specification for Unbonded Single-Strand Tendon Materials

**423.8R**—Report on Corrosion and Repair of Grouted Multistrand and Bar Tendon Systems

**423.9M**—Test Method for Bleed Stability of Cementitious Post-Tensioning Tendon Grout

**301**—Specifications for Structural Concrete, Sec. 9

**318**—Building Code Requirements for Structural Concrete, Ch. 18

**530**—Building Code Requirements for Masonry Structures, Ch. 4

**313**—Standard Practice for Design and Construction of Concrete Silos and Stacking Tubes for Storing Granular Materials, 6.4 through 6.7

**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.17

**349**—Code Requirements for Nuclear Safety-Related Concrete Structures, 18.16, 18.18

**350**—Code Requirements for Environmental Engineering Concrete Structures, 18.13

**357R**—Guide for the Design and Construction of Fixed Offshore Concrete Structures, 6.7

- 372R**—Design and Construction of Circular Wire- and Strand-Wrapped Prestressed Concrete Structures, 3.4  
**373R**—Design and Construction of Circular Prestressed Concrete Structures with Circumferential Tendons, 2.6, 4.5  
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- 207.2R**—Report on Thermal and Volume Change Effects on Cracking of Mass Concrete, 3.3  
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**364.3R**—Guide for Cementitious Repair Material Data Sheet, 5.5, 5.6  
**440.2R**—Guide for the Design and Construction of Externally Bonded FRP Systems for Strengthening Concrete Structures, 3.3  
**440.3R**—Guide Test Methods for Fiber-Reinforced Polymers (FRPs) for Reinforcing or Strengthening Concrete Structures, B.2, B.11  
**549R**—Report on Ferrocement, 5.4  
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- 364.5T**—Importance of Modulus of Elasticity of Repair Materials  
**408R**—Bond and Development of Straight Reinforcing Bars in Tension  
**408.3R**—Guide for Lap Splice and Development Length of High Relative Rib Area Reinforcing Bars in Tension  
**355.3R**—Guide for Design of Anchorage of Concrete: Examples using ACI 318 Appendix D  
  
**343R**—Analysis and Design of Reinforced Concrete Bridge Structures, 9.7  
**355.2**—Qualification of Post-Installed Mechanical Anchors in Concrete, 7.2  
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**506.4R**—Guide for the Evaluation of Shotcrete, 3.3  
**544.4R**—Design Considerations for Steel Fiber-Reinforced Concrete, 2.3

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**318**—Building Code Requirements for Structural Concrete, Ch. 2  
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**440.3R**—Guide Test Methods for Fiber-Reinforced Polymers (FRPs) for Reinforcing or Strengthening Concrete Structures, 1.4

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- 214.4R**—Guide for Obtaining Cores and Interpreting Compressive Strength Results  
**350.1**—Specification for Tightness Testing of Environmental Engineering Concrete Structures  
**364.3R**—Guide for Cementitious Repair Material Data Sheet  
**374.1**—Acceptance Criteria for Moment Frames Based on Structural Testing  
**423.9M**—Test Method for Bleed Stability of Cementitious Post-Tensioning Tendon Grout  
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**544.2R**—Measurement of Properties of Fiber-Reinforced Concrete  
**548.7**—Test Method for Load Capacity of Polymer Concrete Underground Utility Structures  
**T1.2**—Special Hybrid Moment Frames Composed of Discretely Jointed Precast and Post-Tensioned Concrete Members  
  
**228.1R**—In-Place Methods to Estimate Concrete Strength, Ch. 2  
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**238.1R**—Report on Measurements of Workability and Rheology of Fresh Concrete, Ch. 3, 5  
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**222R**—Protection of Metals in Concrete Against Corrosion, 4.4  
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**548.3R**—Report on Polymer-Modified Concrete, 3.2, 3.5  
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- 214R**—Guide to Evaluation of Strength Test Results of Concrete  
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**374.1**—Acceptance Criteria for Moment Frames Based on Structural Testing  
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**ITG-5.2**—Requirements for Design of a Special Unbonded Post-Tensioned Precast Shear Wall Satisfying ACI ITG-5.1  
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- 207.3R**—Practices for Evaluation of Concrete in Existing Massive Structures for Service Conditions, Ch. 3, Ch. 4
- 221R**—Guide for Use of Normal Weight and Heavyweight Aggregates in Concrete, Ch. 6
- 221.1R**—Report on Alkali-Aggregate Reactivity, Ch. 4
- 225R**—Guide to the Selection and Use of Hydraulic Cements, Ch. 8
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- 302.2R**—Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials, Ch. 3, Ch. 4, 9.2
- 304.3R**—Heavyweight Concrete: Measuring, Mixing, Transporting, and Placing, Ch. 6
- 304.6R**—Guide for Use of Volumetric-Measuring and Continuous-Mixing Concrete Equipment, Ch. 6, App. A
- 305R**—Guide to Hot Weather Concreting, Ch. 5
- 309R**—Guide for Consolidation of Concrete, Ch. 17
- 311.4R**—Guide for Concrete Inspection, App. I, 3.7
- 311.5**—Guide for Concrete Plant Inspection and Testing of Ready-Mixed Concrete, Ch. 2
- 318**—Building Code Requirements for Structural Concrete, Ch. 20, 3.1
- 325.10R**—Report on Roller-Compacted Concrete Pavements, Ch. 8, 4.4
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- 355.2**—Qualification of Post-Installed Mechanical Anchors in Concrete, Ch. 5, 7, 8, 9, 12, App. A3
- 355.4-10**—Acceptance Criteria for Qualification of Post-Installed Adhesive Anchors in Concrete, Ch. 6 through 9
- 363.2R**—Guide to Quality Control and Assurance of High-Strength Concrete, Ch. 5, Ch. 6
- 364.1R**—Guide for Evaluation of Concrete Structures before Rehabilitation, Ch. 5, 2.7, 7.5
- 408R**—Bond and Development of Straight Reinforcing Bars in Tension, Ch. 6
- 423.4R**—Corrosion and Repair of Unbonded Single-Strand Tendons, Ch. 4
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- 440R**—Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures, Ch. 5
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- 506.5R**—Guide for Specifying Underground Shotcrete, Ch. 10, Ch. 11, 8.9
- 523.2R**—Guide for Precast Cellular Concrete Floor, Roof, and Wall Units, Ch. 6
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- 304.2R**—Placing Concrete by Pumping Methods, 4.9
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**349.1R**—Reinforced Concrete Design for Thermal Effects on Nuclear Power Plant Structures

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**302.1R**—Guide for Concrete Floor and Slab Construction  
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- 229R**—Controlled Low-Strength Materials, Ch. 6  
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