

**JOINT REINFORCED CONCRETE SPECIAL INSPECTOR
JOB TASKS and OUTLINE**

EXAM ID: 47

- 90 multiple-choice questions – 60 code/30 structural plan reading
- Two-part examination: must have a passing score on both parts at the same time
- 3-1/2-hour time limit: 2 hours for code portion and 1-1/2 hours for plan portion
- Open book

01 General Requirements 10%

0101 Duties and Responsibilities 4%

Review approved plans and specifications for special inspection requirements. Comply with special inspection requirements of the enforcing jurisdiction.

0102 Notification of Discrepancies 3%

Notify the contractor of deviations from approved plans and specifications. If the deviations are uncorrected, notify the architect or engineer of record and the building official of deviations.

0103 Inspection Reports 3%

Submit progress reports to the architect or engineer of record and the building official, describing tests which were performed and compliance of work. Submit final summary report stating whether work requiring special inspection was in conformance with the approved plans and applicable provisions of the building code.

02 Concrete Quality 20%

0201 Mix Verification 5%

Verify that individual batch tickets indicate delivery of the approved mix as specified. Verify time limits of mixing, total water added, and proper consistency and workability for placement.

0202 Testing 8%

Determine the required type, quantity and frequency of tests to be performed on fresh and hardened concrete. Observe sampling of concrete, field testing of fresh concrete, and making of test specimens.

0203	Specimen Handling and Protection	5%
	Provide or arrange for proper specimen identification, site storage and protection, and transportation to the testing laboratory.	
0204	Test Reports	2%
	Provide or arrange for communication of field-testing results to the architect or engineer of record and to the building official.	
03	Reinforcement	40%
0301	Quality	5%
	Verify that reinforcing steels are of the type, grade and size specified and are in conformance with acceptable quality standards. Ensure that reinforcing steel is free of oil, dirt, and rust and that steel is properly coated and/or sheathed as specified.	
0302	Tolerances	7%
	Verify that reinforcing steels are located within acceptable tolerances, and are adequately supported and secured to prevent displacement during concrete placement.	
0303	Cover	6%
	Verify that minimum concrete cover is provided.	
0304	Placement	9%
	Verify that placement of reinforcing steel (or ducts) complies with required spacing, profile and quantity requirements, as indicated by both the approved plans and installation drawings.	
0305	Details	7%
	Verify that hooks, bends, ties, stirrups and supplemental reinforcement are fabricated and placed as specified.	
0306	Splices	6%
	Verify that required lap lengths, stagger and offsets are provided. Verify proper installation of approved mechanical connections per the manufacturer's instructions and/or evaluation reports. Insure that all welds of reinforcing steel and other weldments are as specified, and have been inspected and approved by an approved welding inspector.	

04	Formwork, Joints and Embeds	15%
	0401 Formwork Construction	6%
	Verify that formwork will provide concrete elements of the specified size and shape.	
	0402 Construction Joints	4%
	Verify that the location and preparation of construction joints are in accordance with the approved plans, specifications, and building code requirements.	
	0403 Embeds	5%
	Verify that the type, quantity, size, spacing and location of embedded items are as specified.	
05	Concrete Placement, Protection and Curing	15%
	0501 Pre-placement	3%
	Verify acceptable condition of the place of deposit before the concrete is placed.	
	0502 Placement	3%
	Verify that methods of conveying and depositing concrete avoid contamination and segregation of the mix.	
	0503 Consolidation	5%
	Verify that concrete is being properly consolidated during placement.	
	0504 Protection	4%
	Verify that concrete is protected from temperature extremes, and determine that proper curing is initiated.	