APPLICANT INSTRUCTIONS FOR EXAMINATION

Candidates must be present at the exam site by the designated time below for check-in. Doors will close promptly at 8:00 AM for the exam. Candidates arriving after the exam has started WILL NOT be admitted. Each part of the exam will begin and end at the times designated by the Test Supervisor.

<table>
<thead>
<tr>
<th>Check-in Time:</th>
<th>Exam Start Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:15 – 7:45 AM</td>
<td>8:00 AM</td>
</tr>
</tbody>
</table>

You must have the following items to test:

- A current Government Issued ID such as: Valid driver’s license, Passport, or State ID
- Confirmation letter

You will not be permitted to test without these items. Additionally, you may only test to the test level, exam part(s), and codebook listed on your confirmation letter, without exception. It’s imperative that you verify that all information is correct upon receipt of the confirmation letter. Changes cannot be made at the test site.

Security Agreement and General Terms of Use:
On exam day, prior to taking the exam, all candidates will be required to sign a Security Agreement and General Terms of Use on the back cover of each exam part. This agreement must be signed with pen to be allowed to take the exam. In general, the candidate is agreeing to follow AWS policies and procedures, and to maintain the confidentiality and integrity of the certification program. To see what the agreement specifically states, please visit our website at http://www.aws.org/exam-security-agreement.

The following items are suggested:

- Codebook (original or printed electronic copies only)
  - Must be bound* (refer to page 5 for definition of bound)
  - AWS strongly encourages applicants to obtain copies of AWS codebooks and other publications from the AWS Bookstore or from one of its authorized resellers. Copies of books for sale on sources such as ebay and Craigslist may be counterfeit and contain errors that might affect the outcome of your exam.
- Battery Powered Calculator (refer to page 4 for calculator policy)
  - Must not have memory, programmable, nor text capabilities
  - Must not generate noise

The following items are not permitted during the exam:

- Scratch pads or loose sheets other than published codebook errata
- Any devices that make noise
- Photographic or video devices
- Cell phones

Unscheduled Breaks: Should an unscheduled break during the exam become necessary, you will be permitted to leave one person a time. No material, including cell phones, may be taken from the exam room.

Test Taker Personal Belongings: Tests takers are instructed to place all personal belongings outside of reach during the test, such as under the chair or in their car. Ideally, the personal belongings of all test takers shall be placed in a secure storage area outside the test room, such as in their personal vehicle, hotel room, or locker.
Before the start of your examination, you will be given an answer sheet and exam booklet. All answers must be marked clearly on the Scantron sheet to be scored. (See Sample provided)

**Important directions for marking answers on the Scantron answer sheet**
- Use black lead pencil only (No. 2 or darker)
- Do not use ink or ball-point pens
- Using a No. 2 pencil, fill in the correct answers with dark mark
- Make clean erasures if you change any marks
- Make no stray marks on the answer sheet
- Do not mark two answers in one space

**Exam Results**: It may take anywhere from 4 – 6 weeks to receive exam results. As a courtesy, an automatic email notice is sent to the email address on file once the exam is scored. Exam results will follow via US Postal Service.

**Travel**: AWS does not recommend making travel arrangement earlier than 30 days prior to the exam date. When making travel arrangements for your return flight it should be made for after 9:00pm

If you have any questions regarding your account balance or need a receipt for payment, please contact AWS’ Accounting Department at 1-800-443-9353, extension 240.
Listed below are the calculator requirements for all AWS certification exams.

- All candidates must bring their own calculator to the exam site.
- Sharing calculators during the test is not permitted.
- Candidates may bring a back-up calculator if necessary.

Calculators permitted during testing include:

- Scientific calculators
- Construction calculators
- Four-function calculators

**Unacceptable calculators:**

- Graphing calculators*
- Laptops or other computers, tablets, or cell phones
- Models that can access the Internet, have wireless, Bluetooth, cellular, audio/video recording and playing, camera, or any other smart phone type feature
- Models that have an alphabetical keyboard, pen-input, or stylus
- Models that use electrical outlets, make noise, or have a paper tape

*Graphing Calculators only allowed for the CWEng exams. Please refer to the CWEng Body of Knowledge for a list of acceptable graphing calculators. Graphing calculator models that are not listed on the CWEng Body of Knowledge will not be accepted.
**Certified Welding Inspector and Associate Welding Inspector (CWI and CAWI)**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: FUNDAMENTALS</td>
<td>150</td>
<td>CWI: 72% CAWI: 60%</td>
</tr>
<tr>
<td>Part B: PRACTICAL</td>
<td>46</td>
<td>CWI: 72% CAWI: 60%</td>
</tr>
<tr>
<td>Part C: CODE APPLICATION</td>
<td>46</td>
<td>CWI: 72% CAWI: 60%</td>
</tr>
</tbody>
</table>


**Part B: PRACTICAL** – Two-hour hands-on exam with a minimum of 46 questions using the Book of Specifications.

This part of the exam requires the use of the Book of Specifications to answer some of the exam questions. Those registering for the seminar/exam must download the Part B Examination Book of Specifications from our website. On the exam date, all candidates will be provided and required to use an original copy of the Book of Specifications.

Candidates will be provided with an exam kit for this portion of the exam. Tools will be provided with the exam kit, which include fillet weld gauges, v-wac gauge, dial caliper, ruler, C4.1 gauge, protractor, hi-lo gage, magnifying glass, mirror, and flashlight. Exam will also include an Exam Exhibits Booklet which will contain exhibits such as PQR’s, WPS’s, and WQTR’s for reference on some of the questions. Weld replicas will include a t-joint, groove, bend, and pipe specimen.

**Part C: CODE APPLICATION** – Two-hour open code application exam with a minimum of 46 questions. **Sharing of reference materials is not allowed.** (Refer to Body of Knowledge for the codebook edition being used).

*Copies of the codebook index are **NOT** permitted.*

Prior to the examination, you may tab or highlight your codebook. Written notes in the margins are also allowed. Errata sheets provided by the publisher or distributor of the codebook are permitted. You are **NOT** allowed to write in your codebook or highlight your codebook during the examination. Candidates found writing in their codebook will immediately be removed from the classroom resulting in disqualification from the exam and forfeiture of all examination fees.

If you are registered to take the AWS D1.1 seminar and exam package, you will be provided with an original copy of the D1.1 codebook. If you are registered to take the API 1104 Code Clinic or seminar and exam package, you must purchase your own copy. Codebooks and electronic copies may be purchased through the AWS Bookstore at 1-800-443-9353 ext. 280. A printed electronic copy will be allowed at the exam only if it is bound.

*Bound refers to (1) materials permanently bound, as by stitching or glue, and (2) materials securely fastened in their covers by fasteners that penetrate all papers. Ring binders, spiral binders, plastic snap binders, brads, and screw posts are acceptable fasteners. Staples are not acceptable fasteners. Writing tablets and legal pads are not allowed. Examinees may tab reference books before the exam with Post-it type notes and flags, but pads of Post-it notes and flags are not permitted in the exam room.*

Codebook changes must be made no less than three (3) weeks prior to the confirmed start date of the seminar/exam. Changes will **not** be made after this time, **no exceptions**. Please review your exam confirmation letter prior to the exam date for the correct codebook. Should you have any questions, please feel free to contact the Certification Department at 800-443-9353 extension 273.

For more information on this exam, please access the [CWI Body of Knowledge](#).
## Certified Welding Educator

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: FUNDAMENTALS</td>
<td>150</td>
<td>60%</td>
</tr>
<tr>
<td>Part B: PRACTICAL</td>
<td>46</td>
<td>60%</td>
</tr>
</tbody>
</table>

Part A: FUNDAMENTALS – See Certified Welding Inspector and Associate Welding Inspector instructions
Part B: PRACTICAL – See Certified Welding Inspector and Associate Welding Inspector instructions

For more information on this exam, please access the [CWE Body of Knowledge](#).

## Senior Certified Welding Inspector

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A</td>
<td>138</td>
</tr>
<tr>
<td>Part B</td>
<td>62</td>
</tr>
</tbody>
</table>

Minimum percentage: 72%*

*The minimum percentage to pass is based upon correctly answering a minimum of 144 out of 200 questions. There is no pass/fail status for each individual part. Candidates failing to achieve a 72% must retake both parts of the examination.

Each part of the examination is two hours long and consists of multiple choice questions. The exams will be given in an open book format and you may bring any reference materials listed in the SCWI Body of Knowledge with you when taking the exam. You can tab or highlight your materials with written notes in the margins as an aid to finding the answers to the exam questions. You will not be allowed to write in your materials during the examination. Candidates found writing on their material will immediately be removed from the classroom resulting in disqualification from the exam and forfeiture of all examination fees.

For more information on this exam, please access the [SCWI Body of Knowledge](#).

## Certified Welding Supervisor

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: FUNDAMENTALS</td>
<td>150</td>
<td>70%</td>
</tr>
<tr>
<td>Part B: PRACTICES &amp; ECONOMICS</td>
<td>30</td>
<td>70%</td>
</tr>
</tbody>
</table>

Each part of the examination is two hours long and consists of multiple choice questions. Candidates are only allowed to bring the books listed on the Body of Knowledge to the Prometric testing site. You will not be permitted to write in your materials during the examination.

For more information on this exam, please access the [CWS Body of Knowledge](#).

## Certified Welding Sales Representative

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum # of questions</th>
<th>Minimum # of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE PART</td>
<td>60</td>
<td>70%</td>
</tr>
</tbody>
</table>

The examination is two hours long and consists of 100 multiple choice questions. The exam will be given in a closed book format. The CWSR written examination subjects are listed in AWS B5.14, [CWSR Body of Knowledge](#).

## 9 Year Recertification Certified Welding Inspector by Part B Exam

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part B: PRACTICAL</td>
<td>46</td>
<td>72%</td>
</tr>
</tbody>
</table>

Part B: PRACTICAL – See Certified Welding Inspector and Associate Welding Inspector instructions

**Important Note:** AWS QC1 defines endorsements as “Indication of an additional skill documented in writing and added to one’s certification credential(s)”. In fulfilling the 9-year recertification requirement, endorsements cannot be taken to the codebook to which your CWI certification was attained.

For more information on this exam and other 9-Year recertification options, please visit our [website](#).
Certified Radiographic Interpreter

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: GENERAL</td>
<td>70</td>
<td>70%</td>
</tr>
<tr>
<td>Part B: PRACTICAL</td>
<td>40</td>
<td>70%</td>
</tr>
<tr>
<td>Part C: CODE SPECIFIC</td>
<td>78</td>
<td>70%</td>
</tr>
</tbody>
</table>

*80% overall average of all exams

For the seminar and all parts of the examination, candidates will have access to Reference Codes and Standards which contain entire or excerpted portions of AWS, ASME, API, and ASTM standards. The Reference Codes and Standards are for educational purposes only and must be returned to AWS after the examination process. Candidates may bring a scientific calculator which includes a square root function.

Part A: GENERAL – This exam consists of 70 multiple choice questions and tests an individual’s knowledge of welding, radiographic theory, film selection, film processing, film handling and storage, codes, specifications and other standards. Parts A and C shall be administered in a single three-hour session and candidates may not use any material other than the Reference Codes and Standards.

Part B: PRACTICAL – This exam consists of the evaluation of a set of 12 radiographs in a three-hour exam consisting of 40 multiple choice questions. Each candidate will have use of a densitometer and film viewer in addition to the Reference Codes and Standards and other tools for convenience. Each test radiograph will be presented with a reader sheet giving details about the circumstances of the radiographic exposure. Candidates will be required to assess radiographic quality and indications for each test radiograph in accordance with one of four industry-accepted codes AWS D1.1, API1104, ASME Section V and VIII, and ASTM.

Part C: CODE SPECIFIC – This exam consists of 78 multiple choice questions that require the candidate to be knowledgeable with regards to the radiographic quality and film interpretation requirements of AWS D1.1, API1104, ASME Section V and VIII, and ASTM. Parts A and C of the CRI examination shall be given in a single three-hour session and candidates will only have access to the Reference Codes and Standards to answer the questions.

Note: If you successfully pass your CRI certification examination, this credential can exempt you from your next 9-Year CWI or SCWI Recertification Exam. You will need to complete a 9-Year Recertification Application by CRI certification.

For more information on this exam, please access the CRI Body of Knowledge.

Certified Welding Engineer

Each of the four examinations shall not have an individual score less than sixty percent:....................... 60%

Minimum weighted percentage for all 4 parts: ................................................................. 70%

The CWEng examination is four parts. Parts 1 and 2 must be successfully completed to take Parts 3 and 4. The first two parts of the exam are closed book and cover basic science fundamentals and applied science fundamentals. Parts 1 and 2 are each two-hour written multiple-choice exams (total time of four hours). They are given together and must be passed together. If the candidate fails only one part, only that part must be repeated.

Parts 3 and 4 of the exam are open book examinations on welding related disciplines and practical welding and related applications. They are each three hours in length. Part 3 is a 45-question essay exam. Part 4 is a 39-question multiple choice exam to the D1.1 Structural Welding Code – Steel (Refer to the Body of Knowledge for the current edition being used). Candidates, who have successfully passed Parts 1 and 2, will be invited to sit for these exams and a separate application must be completed. Candidates are invited to bring any textbooks, articles or codes in their library. Programmable calculators are allowed that do not have audible sounds.

The CWEng written examination subjects are listed in AWS B5.16, Specification for the Qualification of Welding Engineers. For more information on this exam, please access the CWEng Body of Knowledge.

Certified Robotic Arc Welding Operator & Technician

<table>
<thead>
<tr>
<th>Examination</th>
<th>Minimum number of questions</th>
<th>Minimum percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A: CRAW FUNDAMENTALS</td>
<td>136</td>
<td>75%</td>
</tr>
<tr>
<td>Part B: CRAW PRACTICAL</td>
<td>30</td>
<td>75%</td>
</tr>
</tbody>
</table>

Part A of the exam is two hours and will be given in a closed book format. The Part B exam consists of 30 tasks, which are to be completed in sequential order. The CRAW written examination subjects are listed in AWS QC19, Specification for AWS Certification of Robotic Arc Welding Personnel.

For more information on this exam, please access the CRAW Performance Test Candidate Information Booklet.

Endorsement Examination
Minimum number of questions: 46-60  Minimum percentage: 72%

**Part C: CODE APPLICATION**

Code Application exam subjects earn full credit towards recertification:
- a. API 1104 Pipeline
- b. AWS D1.1 Structural Steel
- c. AWS D1.2 Structural Aluminum
- d. AWS D1.5 Bridge Welding
- e. AWS D15.1 Railroad
- f. AWS D17.1 Aerospace
- g. ASME Section IX, B31.1, + B31.3
- h. ASME Section VIII, Div. 1 and Section IX
- i. Structural Drawing Reading (Closed book) 30  72%

Non-code application exam subjects earn 20 PDHs towards 9-Year recertification:
- j. Structural Bolting Inspection 44  72%

**Important Note:** AWS QC1 defines endorsements as “Indication of an additional skill documented in writing and added to one’s certification credential(s)”. In fulfilling the 9-year recertification requirement, endorsements cannot be taken to the codebook to which your CWI certification was attained.

For more information regarding study material, please visit our [website](#).

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**Certified Resistance Welding Technician - Beta**

Minimum number of questions: 100  Minimum percentage: 75%

Closed book general knowledge exam on fundamental principles covering topics listed in clause 7.2 of [AWS QC20](#). For more information please visit the [website](#).

**Examination Results**

Because this is a beta exam, results will not be released until an analysis has been completed. This can take several months. You will receive your exam results by U.S. mail.

**Disclaimer:** A photocopy of any AWS standard does not constitute an official copy. The user bears all responsibility for the accuracy of content of photocopied materials.

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