



CCO

CANDIDATE HANDBOOK

• **SIGNALPERSON**

®



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Certification Policies

SIGNALPERSON PROGRAM

ELIGIBILITY

To be eligible for CCO certification, candidates must:

- Be at least 18 years of age
- Comply with CCO Substance Abuse Policy
- Pass a written examination
- Pass a practical examination
- Comply with the Code of Ethics for Signalpersons

EXAMINATION FEES

For all exam and related fees, visit www.nccco.org/fees.

CERTIFICATION TIME FRAMES

Candidates have 12 months from the time they pass their first exam in which to pass the corresponding exam. Any tests passed within a 12-month period count towards certification. For example, a candidate who fails the Signalperson written exam in December 2024 but passes the Signalperson practical exam in January 2025 has until the end of January 2026 to retake (and pass) the Signalperson written exam.

RECERTIFICATION REQUIREMENTS

CCO Signalperson certification is valid for five years.

Recertification candidates must complete all of their recertification requirements during the 12 months prior to their certification's expiration date. Regardless of the date of the exams within that one-year period, the new five-year certification period begins from the date of expiration of the candidate's initial certification.

Recertificants must:

- Pass the Signalperson practical examination
- Comply with CCO's Substance Abuse Policy
- Comply with CCO's Code of Ethics

Certified candidates may take their Signalperson Practical Examination up to one year prior to their certification's expiration date. Regardless of the date of the examination within that one-year period, the new five-year certification period begins from the date of expiration of the candidate's initial certification.

[Note: Candidates who recertify more than 12 months prior to their certification's expiration date will have their new certification period begin immediately, not from the end of their current certification period.]



Written Examination Outline

SIGNALPERSON

60 QUESTIONS/60 MINUTES (CALCULATOR NOT PERMITTED)

The written examination for the CCO signalperson certification program tests the following knowledge areas:

Domain 1: Hand Signals

- Approximately 31% of test

Domain 2: Voice Communication

- Approximately 17% of test

Domain 3: Basic Knowledge of Crane Operations

- Approximately 24% of test

Domain 4: Situational Awareness (Site-Specific Considerations)

- Approximately 15% of test

Domain 5: Safety Standards and Regulations

- Approximately 13% of test

DOMAIN 1: HAND SIGNALS

Approximately 31% of test

1. Demonstrate the standard method hand signals for mobile cranes.
2. Demonstrate the standard method hand signals for tower cranes.
3. Always maintain visibility with operator when signaling a load.
4. Provide discernible and visible hand signals.
5. When signals are being delivered they will be maintained.
6. Take appropriate action if the operator is not following signals correctly.

DOMAIN 2: VOICE COMMUNICATION

Approximately 17% of test

1. Demonstrate proper use and limitations of communication equipment.
2. Mitigate communication barriers, i.e. wind, language, interference.
3. Verify fully charged batteries are used and extra batteries are readily available.
4. Verify the communication device is in proper working order.
5. Always maintain clear and effective communication with the operator.
6. Demonstrate the three elements of voice signals (function and direction, distance and/or speed, function stop).

7. Account for the operator's perspective when signaling.
8. Take appropriate action if the operator is not following signals correctly.

DOMAIN 3: BASIC KNOWLEDGE OF CRANE OPERATIONS

Approximately 24% of test

1. Demonstrate understanding of basic crane terminology, limitations and definitions.
2. Identify and apply the effects of size, shape, weight, and center of gravity of the load during a lift.
3. Recognize boom deflection and how to compensate for it.
4. Recognize and correct the causes and effects a moving load has on a crane.
5. Always keep the hoist line vertical during operations.
6. Identify and correct drift.
7. Identify the consequences of side loading.
8. Identify cause and effect of two blocking.
9. Ensure no personnel are in the path of the load or the fall zone.

DOMAIN 4: SITUATIONAL AWARENESS (SITE-SPECIFIC CONSIDERATIONS)

Approximately 15% of test

1. Review lift requirements with supervision/operator/crew.
2. Identify and avoid hazards and obstacles.
3. Recognize the effect of weather conditions.
4. Ensure the proper type of signals are being used.
5. Recognize situations that require the application of emergency procedures.
6. Use of technology.
7. Multiple load line use.

DOMAIN 5: SAFETY STANDARDS AND REGULATIONS

Approximately 13% of test

1. Recognize the current OSHA and ASME standards that are relevant.
2. Identify and apply power line hazard protection standards and regulations.
3. Identify and apply standards and regulations for personnel platforms.
4. Multiple cranes single lift.



Practical Examination

SIGNALPERSON

The following is an outline of the practical testing procedure, as provided to candidates at the time of testing.

CANDIDATE INSTRUCTIONS

The CCO Signalperson practical examination consists of 30 scenarios. There is no time limit for this examination. Candidates will typically complete the exam in approximately 15 minutes.

The Test Site Coordinator is responsible for setting the testing schedule. During the practical exam, candidates are under the direction of the Practical Exam Proctor and must follow the Proctor's directions at all times.

Only the candidate and Practical Exam Proctor are allowed in the testing area.

You will be directed to give the hand or voice signal to match the graphic displayed on the screen.

1. All hand and voice signals must be given in accordance with OSHA 1926 Subpart CC. Where OSHA 1926 Subpart CC does not address a particular signal, ASME B30.5 and ASME B30.3 signals will be used (for example, one-handed telescoping boom signals).
2. Make sure to give only one signal at a time (unless giving a "move slowly" command).
3. Give all signals in a clear and precise manner.

NOTE: A proper *stop* hand signal is moving arm back and forth at least one time.

4. At the start of each scenario, the instructions will be shown on the screen and given verbally. You will be asked if you understand the instructions. Take time to make sure you understand the instructions before proceeding.
5. ***Follow the instructions!*** If you have any questions, ask the Proctor before beginning each scenario.



Reference List

The latest versions of the following reference materials are used by CCO's Signalperson Exam Management Committee to verify the accuracy of CCO test questions.

ASME, B30.5 Mobile and Locomotive Cranes

www.asme.org

OSHA 29 CFR 1926 SUBPART CC—CRANES AND DERRICKS IN CONSTRUCTION

www.osha.gov

CCO SIGNALPERSON REFERENCE MANUAL

www.nccco.org/signalperson-study-materials

This manual was created to assist candidates preparing to take the CCO signalperson certification examinations. The information contained in this manual has been compiled from a number of different sources. The sources and the relevant material selected for inclusion in the reference manual are as follows:

- ASME B30.5 Mobile & Locomotive Cranes, Section 5-3.3: Signals
- ASME B30.3 Construction Tower Cranes, Section 3-3.3: Signals
- OSHA 29 CFR Part 1926—Subpart CC: Cranes and Derricks Used in Construction (Sections 1419–1422, and 1428: Signalperson Requirements and Qualifications)

Please note that candidates should be familiar with all sections of ASME B30.5 and OSHA 1926 Subpart CC that are relevant to crane operations and signaling operations.



CCO Policies

SIGNALPERSON

Code of Ethics

www.nccco.org/coe

Disciplinary Policy

www.nccco.org/discipline

Substance Abuse Policy

www.nccco.org/abuse

Testing Accommodations

www.nccco.org/accommodations

Test Security

www.nccco.org/security

Information Release Policy

www.nccco.org/inforelease



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