

NACE Certified Coating Applicator (CCA)
Practical Exam
NACE-CCA-001

Exam Preparation Guide June 2019

# **Table of Contents**

Introduction	3
Target Audience	3
Requirements	3
Personal Protective Equipment	3
Exam Blue Print	4
Types of Tasks	5
Description of Tasks	5
Sample Tasks	6
Preparation	7
Available Training	7
Standards	7
Suggested Study Material	7
Reference Material Provided During Exam	8
What to expect on test day	8
Arriving at the NACE approved Test Site	8

#### Introduction

The Coating Applicator practical exam is designed to assess whether a candidate has the requisite knowledge and skills that a minimally qualified coating applicator must possess. The 63 hands-on tasks are based on the coating applicator body of knowledge. A candidate should have working knowledge of surface preparation, cleanliness, environmental conditions, coating mixtures, coating application and safety.

Test Name	NACE-Certified Coating Applicator
	Practical Exam
Time	150 Minutes*
Number of Questions	63 tasks
Format	Hands-on
Passing Score	Pass or Fail

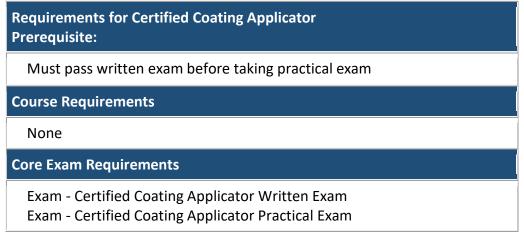
#### **Target Audience**

Ideal candidates for coating applicator certification are industrial painters with experience, who can prepare a surface and apply coating according to the specification. The Certified Coating Applicator should be able to safely perform the surface preparations, mixing, and coating application competently. The coating applicator exam is intended to certify applicators by assessing key competencies of a painter that are distinguishable from those of a helper.

### Requirements

#### Personal Protective Equipment (PPE)

The candidate must wear steel/composite toed work boots, long pants, hard hat, hearing protection and safety glasses during the exam. The candidate must wear appropriate PPE for hand and power tool cleaning, blasting, mixing and painting.



Renewal requirements: Recertification application, 1.5 years work experience, 24 hours professional development (8 hours per year) \* required every 3 years \*Approval required

# **Exam Blue Print**

NOTE: At the end of the Practical exam the candidate should log on to their NACE profile to view a bar chart of strengths and weaknesses that correspond to these Domains.

Doma	in 1- Safety	24-28 %
•	Local and Other Applicable Safety Codes, Practices, Standards, and Regulations	1 1 20 /6
•	Hazard communication (HAZCOM) and safety Data Sheet	
•	Working with hand and power tools	
•	Personal protective equipment (PPE)	
•	Selection and use of respiratory protection	
•	Hearing conservation	
•	Avoiding heat related injury	
•	Safety Directly related to Specific Materials/Equipment	
•	Abrasive cleaning (dry methods)	
•	Exposure to high pressure lines (Hydraulic/Pneumatic)	
•	Exposure to toxic metals	
•	Exposure to hazardous substances	
•	Exposure to and use of hydrocarbon solvents	
	Exposure to and use of flyarocarbon solvents	
Doma	in 2- Surface Preparation	20-24 %
•	Ensure surface preparation and acceptability for coating application	
•	Basics of surface preparation	
•	Identify conditions, contaminants and defects	
•	Perform visual inspection of substrate	
•	Equipment Setup and Operation- Abrasive Blasting	
•	Safety equipment	
•	Equipment setup-compressor, blast, pot, separators, etc.	
•	Equipment operation- all control valves	
•	Hose and coupling layout	
•	Nozzle management- i.e. if it is worn out replace it	
•	Perform surface preparation	
•	Solvent cleaning	
•	Dry abrasive blast cleaning standards (Visual guides)	
•	Power and hand tool cleaning standards	
Doma	in 3- Prepare Coating	22-26 %
•	Protect adjacent surfaces from coating application (overspray)	
•	Identify and mix materials	
•	Read the coating can label	
•	Confirm manufacturer pack/kit sizes	
•	Record batch numbers	
•	Mix coating per PDS procedure	
•	Follow application procedures	

#### **Domain 4- Apply Coating**

- Prepare equipment
- · Equipment setup and adjustment
- · Identification of types of equipment
- Inspect/maintain/store required PPE
- Put on PPE
- Execute method of application
- Apply coating per PDS (Product Data Sheet)
- In-process measurement and monitoring
- Overspray control-atomization, containment, holding gun properly not to spray to far beyond surface
- Acceptable environmental conditions-i.e. understand abnormal paint conditions- rain fog
- Clean up
- Prepare unused coating for disposal-i.e. make sure it is not put down a drain or sprayed in the grass
- Store equipment
- Clean work area
- Personal hygiene

# **Types of Tasks**

# **Description of Tasks**

The tasks on this exam consist of hands-on demonstrations of equipment knowledge and related safety features, use of proper personal protection equipment. According to the Product Data sheet, the candidate should safely and accurately be able to:

- Walk through test area: identify parts and determine if the equipment is ready and safe to use
- Use hand and power tools,
- Prepare the surface to the specified level of cleanliness,
- Mix and apply coating per PDS.

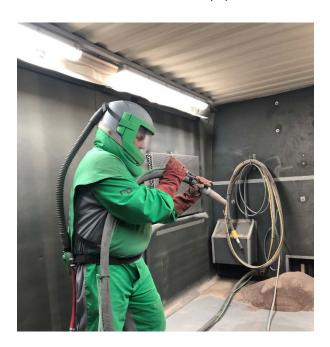
The tasks are based on the knowledge and skills required in the coating applicator industry.

28-30%

Sample Tasks
Demonstrate safe use of hand and power tools.



Demonstrate safe use of blast equipment.



## Preparation

### **Available Training**

Industrial Coating Application (ICA) eCourse (not required)

#### Standards

ANSI/NACE No. 13/SSPC-ACS-1 Standard Practice (Industrial Coating and Lining Application Specialist Qualification and Certification)

ISO 8501-1:2007 – Rust grades and preparation of uncoated steel substrates and steel substrates after overall removal of previous coatings.

ISO 8501-2:2001 – Preparation grades of previously coated steel substrates after localized removal of previous coatings.

ISO 8501-3:2007 – Preparation grades of welds, edges and other areas with surface imperfections. NACE No. 1/SSPC-SP 5 White Metal Blast Cleaning (RP0494-2006)

NACE No. 2/SSPC-SP 10 Near White Metal Blast Cleaning (RP0594-2006)

NACE No. 3/SSPC-SP 6 Commercial Blast Cleaning (RP0694-2006)

NACE No. 4/SSPC-SP 7 Brush Off Blast Cleaning (RP0794-2006)

NACE No. 6/SSPC-SP 13 Surface Preparation of Concrete (RP0397-2003)

NACE No. 8/SSPC-SP 14 Industrial Blast (RP0299-2006)

NACE No. 10/SSPC-PA 6 Fiberglass-Reinforced Plastic (RFP) Linings Applied to Bottoms of Carbon Steel Aboveground Storage Tanks (RP0202-2006)

NACE No. 11/SSPC-PA 8 Thin-Film Organic Linings Applied in New Carbon Steel Process Vessels (RP0103-03)

NACE No. 12/AWS C2.23M/SSPC-CS 23.00 Specification for the Application of Thermal Spray Coatings (Metallizing) of Aluminum, Zinc, and Their Alloys and Composites for the Corrosion Protection of Steel (2003)

SSPC-PA 1 Shop, Field, and Maintenance Coating of Metals (2016)

SSPC-PA 2 Procedure for Determining Conformance to Dry Coating Thickness Requirements (2015)

SSPC-SP 1 Solvent Cleaning (2015)

SSPC-SP 2 Hand Tool Cleaning (2004)

SSPC-SP 3 Power Tool Cleaning (2004)

### Suggested Study Material

Local and International safety rules/regulations (i.e. OSHA, ISO, etc.)

### Reference Material Provided During Exam

Safety Data Sheet (SDS) Product Data Sheet (PDS)

### What to expect on test day

### Arriving at the NACE approved Test Site.

- 1. You will be required to show proof of valid government issue ID
  - a. The First and Last name on the ID must match exactly the name on the registration
- 2. You will be made aware of and expected to adhere to the test sites health and safe rules.
- 3. You should bring the following PPE/RPE:
  - a. steel/composite toe capped shoes/boots, hardhat, coveralls, safety glasses, and gloves, when possible. The test site will have some extras available. The test site will have steel toed caps for work boots that are not steel toed/composite boots.
  - b. The test site will provide a blast suit and hood, hearing protection, disposable paint hood, face shield, etc.
  - c. You may bring your own suitable PPE/RPE.
    - i. in-date face fit card if you are bringing your own respirator.
- 4. Test Site Security Rules
  - a. No mobile devices (such as cell phones, tablets or cameras) will be allowed into the test area.
  - b. Candidates not currently testing will not be allowed in the test area.
  - c. Candidates must leave the premises after completing the exam.
  - d. Candidates must sign a non-disclosure agreement stating that they will not share or discuss any aspect of the exam.
- 5. You will be asked to perform 63 tasks throughout the exam in a manner that is safe for both you and those around you. Safe working practices must always be exercised.
- 6. You will receive an e-mail notification of your exam results.
  - a. DO NOT confront or address the NACE Examiner about your exam results.
  - b. NACE Examiners DO NOT determine whether a candidate earns a pass or fail and have no ability to access or modify the results of a candidate's exam.