



CONTRACTORS STATE LICENSE BOARD LICENSE EXAMINATION STUDY GUIDE



WELDING (C-60)

Content of the Examination

The Welding (C-60) Examination is divided into five major sections:

1. Planning and Estimation (23%)

- Plans, specifications, and drawings
- Equipment, materials, and supplies

2. Welding Preparation (17%)

- Material preparation
- Job preparation

3. Welding, Brazing, and Soldering (26%)

- Welding processes
- Techniques
- Post-welding procedures
- Brazing and soldering

4. Cutting Processes (8%)

- Layout and placement of cables
- Stressing of cables
- Equipment handling

5. Safety (26%)

- Job site safety
- Personnel safety

Percentages are approximate

Test Site Policy

This is a closed-book examination. No reference materials may be used during the examination. All materials brought to the examination site must be left in an unmonitored area at your own risk.

Test Strategy

This is a multiple-choice examination with four choices per question. Examination questions are written to provide only one BEST answer. Some questions require mathematical computation. A calculator will be provided.

There is no penalty for guessing. If you are unsure about a particular question, it is better to try to answer the question than to leave the question blank.

Plenty of time is provided to answer all examination questions, so be sure to read each question and its four choices completely and carefully before selecting the BEST possible answer to the question.

Sample Questions

Below are three typical examination questions.
The correct answer is underlined.

1. Alternating current would most likely be used in GTAW to weld which of the following metals?
 - a. Low carbon steel
 - b. Deoxidized copper
 - c. Aluminum
 - d. Stainless steel

2. What is the MINIMUM thickness of steel that is covered by the AWS D1.1 Structural Steel welding code?
 - a. 1/8"
 - b. 1/4"
 - c. 5/16"
 - d. 3/8"

3. When welding with FCAW, how can the operator control excess spatter?
 - a. Change the drag angle.
 - b. Run stringer beads.
 - c. Shorten the stickout.
 - d. Lengthen the stickout.

All questions are written and reviewed by licensed contractors who are actively working in the trade

Resources

*Publisher information for reference books and code is provided below. Other sources for reference books may be found online. **California code books can be viewed online: www.bsc.ca.gov***

Managers' Guide for Welding. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA).
PHONE: (703) 803-2980
INTERNET: www.smacna.org

Modern Welding. Goodheart-Wilcox.
PHONE: (800) 323-0440
INTERNET: www.g-w.com

Safety in Welding, Cutting, and Allied Processes, ANSI Z49.1. American Welding Society.

PHONE: (305) 826-6193
INTERNET: www.aws.org

Standard Symbols for Welding, Brazing, and Nondestructive Examination, A2.4. American Welding Society.

PHONE: (305) 826-6193
INTERNET: www.aws.org

State of California General Industry & Electrical Safety Orders (Cal/OSHA) and State of California Construction & Electrical Safety Orders (Cal/OSHA). 2015. California Code of Regulations, Title 8. Mancomm.

PHONE: (877) 626-2666
INTERNET: www.mancomm.com

Structural Welding Code –Steel, D1.1. American Welding Society.

PHONE: (305) 826-6193
INTERNET: www.aws.org

Publisher information is current as of 1/17