

# 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 Estimating (17%)

- Reviewing plans and specifications
- Estimating equipment and materials
- Identifying metals

### 2. Welding Preparation (22%)

- Preparing job sites
- Setting up welding equipment
- Preparing materials

#### 3. Welding, Brazing, and Soldering (28%)

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

#### 4. Cutting Processes (11%)

- Setting up cutting equipment
- Cutting techniques
- Finishing requirements

#### 5. Safety (22%)

- Job site and equipment safety
- Preventing fire hazards
- Personnel safety

\*Percentages are approximate\*

#### **Test Policy**

This is a closed-book examination. No reference materials may be used during the examination.

### **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 marked with an asterisk (\*).

- 1. 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"
- **2.** The total steel for a project weighs 2.5 tons. If the steel costs \$38 per 100 pounds, how much will the steel cost for this project?

**a.** \$950 **b.** \$1,900\* **c.** \$3,800 **d.** \$9,500

- **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.dgs.ca.gov/bsc

*The Independent Shop's Guide to Welding Safety and Health.* American Welding Society. PHONE: (800) 443-9353 INTERNET: www.aws.org

*Modern Welding.* Goodheart-Willcox. PHONE: (800) 323-0440 INTERNET: www.g-w.com Safety in Welding, Cutting, and Allied Processes, AWS Z49.1. American Welding Society. PHONE: (800) 443-9353 INTERNET: www.aws.org

Standard Symbols for Welding, Brazing, and Nondestructive Examination, A2.4. American Welding Society. PHONE: (800) 443-9353 INTERNET: www.aws.org

State of California General Industry & Electrical Safety Orders (Cal/OSHA) and State of California Construction & Electrical Safety Orders (Cal/OSHA). 2024. California Code of Regulations, Title 8. Mancomm. PHONE: (877) 626-2666 INTERNET: mancomm.com VIEW ONLINE: www.dir.ca.gov/dosh/LawsAndRegulations.htm

## Structural Welding Code – Steel, D1.1.

American Welding Society. PHONE: (800) 443-9353 INTERNET: www.aws.org

\*Publisher information is current as of 12/23\*