### ORNAMENTAL METAL (C-23)

#### Content of the Examination

The Ornamental Metal (C-23) Examination is divided into five major sections:

1. **Planning and Estimating (25%)**
   - Review project information
   - Design ornamental metal products
   - Site evaluation
   - Fabrication preparation
   - Cost calculation

2. **Fabrication (23%)**
   - Cutting
   - Tooling
   - Forming metal
   - Assembly

3. **Installation (18%)**
   - Posts
   - Fences, railings, and gates
   - Staircases
   - Miscellaneous products

4. **Finishes and Repairs (12%)**
   - Preparation and application
   - Repairs

5. **Safety (22%)**
   - Personnel and job site
   - Transportation
   - Environmental

*Percentages are approximate*

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### 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.

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### 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. At what point during construction must interior handrails be installed in a custom two-story home?
   a. Before the final inspection
   b. Before the floor coverings
   c. Before the second story is finished
   d. Before the drywall and after framing

2. If an architectural drawing gives a scale of 1/8” = 1’, what does a line 2-1/4” equal?
   a. 10’ 6”
   b. 17’ 6”
   c. 18’ 0”
   d. 24’ 8”

3. According to the California Building Code, how is headroom clearance measured on a standard stairway?
   a. Vertically from the center of each tread
   b. Vertically from a line connecting the nosings
   c. From the bottom of and parallel to the first riser
   d. Perpendicularly from a line connecting the nosings

*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

PHONE: (800) 786-4452
INTERNET: www.iccsafe.org

**AWS A3.0 Standard Welding Terms and Definitions.** American Welding Society.
PHONE: (800) 443-9353
INTERNET: www.aws.org

**California Vehicle Code.** Department of Motor Vehicles.
INTERNET:
leginfo.legislature.ca.gov/faces/codes.xhtml

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

PHONE: (877) 626-2666
INTERNET: www.mancomm.com
VIEW ONLINE:
www.dir.ca.gov/dosh/LawsAndRegulations.htm

**Victor Cutting, Heating and Welding Guide.** Thermadyne Industries, Inc.
PHONE: (800) 426-1888
INTERNET:

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

*Publisher information is current as of 10/19*