

# **STUDY GUIDE HYDRO STRUCTURAL CARPENTER**

**TEST #2425**

## INTRODUCTION

The **2425 Hydro Structural Carpenter Test** is a job knowledge test designed to cover the major knowledge areas necessary to perform the job. This Guide contains strategies to use for taking tests and a study outline, which includes knowledge categories, major job activities, and study references.

## TEST SESSION

It is important that you follow the directions of the Test Administrator exactly. If you have any questions about the testing session, be sure to ask the Test Administrator before the testing begins. During testing, you may NOT leave the room, talk, smoke, eat, or drink. Since some tests take several hours, you should consider these factors before the test begins.

**All cellular/mobile phones, pagers or other electronic equipment will NOT be allowed in the testing area.**

All questions on this test are multiple-choice or hot spot questions. Multiple choice questions have four possible answers. Hot spot questions have a picture, and you must click the correct spot on the picture to answer the question. All knowledge tests will be taken on the computer. For more information on this, please see the next section of this study guide on Computer Based Testing.

**The test has a three hour time limit.**

**A non-programmable basic calculator will be provided for you to use during the test. You will NOT be able to bring or use your own calculator during testing.**

You will receive a Test Comment form so that you can make comments about test questions. Write any comments you have and turn it in with your test when you are done.

## INFORMATION GUIDE FEEDBACK

At the end of this Guide you have been provided with an Information Guide Feedback page. If a procedure or policy has changed, making any part of this Guide incorrect, your feedback would be appreciated so that corrections can be made.

## **TEST TAKING STRATEGIES**

### **INTRODUCTION**

The **2425 Hydro Structural Carpenter Test** contains multiple-choice questions and may also contain hot spot questions. The purpose of this section is to help you to identify some special features of a multiple-choice test and to suggest techniques for you to use when taking one.

Your emotional and physical state during the test may determine whether you are prepared to do your best. The following list provides common sense techniques you can use before the test begins.

### **CONFIDENCE**

If you feel confident about passing the test, you may lose some of your anxiety. Think of the test as a way of demonstrating how much you know, the skills you can apply, the problems you can solve, and your good judgment capabilities.

### **PUNCTUALITY**

Arrive early enough to feel relaxed and comfortable before the test begins.

### **CONCENTRATION**

Try to block out all distractions and concentrate only on the test. You will not only finish faster but you will reduce your chances of making careless mistakes. If possible, select a seat away from others who might be distracting. If lighting in the room is poor, sit under a light fixture. If the test room becomes noisy or there are other distractions or irregularities, mention them to the Test Administrator immediately.

### **BUDGET YOUR TIMES**

Pace yourself carefully to ensure that you will have enough time to complete all items and review your answers.

### **READ CRITICALLY**

Read all directions and questions carefully. Even though the first or second answer choice looks good, be sure to read all the choices before selecting your answer.

## **MAKE EDUCATED GUESSES**

Make an educated guess if you do not know the answer or if you are unsure of it.

## **CHANGING ANSWERS**

If you need to change an answer when testing on a computer, be sure that the new answer is selected instead of the old one.

## **RETURN TO DIFFICULT QUESTIONS**

If particular questions seem difficult to understand, make a note of them, continue with the test and return to them later.

## **DOUBLE CHECK MATH CALCULATIONS**

Use scratch paper to double check your mathematical calculations.

## **REVIEW**

If time permits, review your answers. Do the questions you skipped previously. When testing on a computer, make sure each multiple-choice question has a dot next to the correct answer.

Remember the techniques described in this section are only suggestions. You should follow the test taking methods that work best for you.

## **JOB KNOWLEDGE CATEGORIES AND STUDY REFERENCES**

Below are the major job knowledge areas (topics) covered on the **2425 Hydro Structural Carpenter Test** and the associated study references. Listed next to each knowledge category is the number of items on the exam that will measure that topic. You can use this information to guide your studying. Some exams also contain additional pretest items. Pretest items will appear just like all of the other items on your exam, but they will not affect your score. They are an essential part of ensuring the **2425 Hydro Structural Carpenter Test** remains relevant to successful performance of the job.

There are a total of 94 items on the **2425 Hydro Structural Carpenter Test** and the passing score is 73%. This score was determined during the test validation process.

### **TOOLS (26 ITEMS)**

Understanding of how to use common hand, power and concrete demolition tools used in construction, concrete, carpentry and welding procedures. Examples include squares, hammers, surveying equipment, saws, routers, etc.

#### **References**

Modern Carpentry (1996). Willis H. Wagner and Howard Bud Smith. The Goodheart-Willcox Company.

Carpentry (1997). Leonard Koel, American Technical Publishers, Inc.

Moving the Earth: The Workbook of Excavation (1998). Herbert L. Nichols. McGrawHill.

Cal OSHA. CCR Title 8. Subchapter 7 General Industry Safety Orders. Article 7.

Building Trades Dictionary (1996). Leonard P. Toenjes. American Technical Publishers.

## **STANDARD PROCEDURES (45 ITEMS)**

Understanding of how to safely perform the following procedures: plumbing including fittings and threading pipes; construction including standards and interpretation of construction sketches; concrete and carpentry including standards and techniques. Understanding of safety procedures and standards including lifting techniques and personal protective equipment.

### **References**

Plumbing- Design and Installation (2002). L.V. Ripka. American Technical Publishers.

Modern Carpentry (1996). Willis H. Wagner and Howard Bud Smith. The Goodheart-Willcox Company.

2010 California Plumbing Code. California Code of Regulations (CCR). Title 24. Section 5 Non- Mandatory Appendix I.

Basic Engineering For Builders (2001). Schwarz Max. Craftsman Book Company.

Carpentry (1997). Leonard Koel, American Technical Publishers, Inc.

Basic Blueprint Reading and Sketching (2004). Thomas P. Olivo. Thomson Delmar Learning.

Concrete Form Work (1997). Leonard Koel. American Technical Publishers.

Cal OSHA. CCR Title 8. Subchapter 4 Construction Safety Orders Article 32. Subchapter 7 General Industry Safety Orders Article 10.

## **SAFETY (14 ITEMS)**

Understanding of safety and operating procedures, standards, and policies including: lifting techniques, personal protective equipment, trenching and shoring, ladder use, structure maintenance work, and construction work.

### **References for Safety**

Modern Carpentry (1996). Willis H. Wagner and Howard Bud Smith. The Goodheart-Willcox Company.

Cal OSHA. CCR Title 8.

Subchapter 4 Construction Safety Orders Article 4, 6, 16

Subchapter 7 General Industry Safety Orders Article 4, 10 Introduction, 98

Subchapter 5 Electrical Safety Orders Article 11

## **MATHEMATICS AND MEASUREMENT (9 ITEMS)**

Understanding of basic mathematic concepts such as: addition, subtraction, multiplication, division, volume, area, fractions and decimals. Understanding of units of measure including foot, yard, and inch.

### **References for Mathematics and Measurement:**

Mathematics Made Simple (2003). Thomas Cusick. Publisher: Made Simple

## **SAMPLE QUESTIONS**

The following sample questions should give you some idea of the form the test will take.

**1. Batts and blankets are terms associated with ?.**

- a. roofing materials
- b. fiberglass insulation
- c. concrete footings
- d. windows

**2. – 2” x 4” stud is a common piece of lumber with a length of ?.**

- a. - 6"
- b. – 92 1/4"
- c. – 8"
- d. - 20"

**3. When ordering standard grade lumber for a project, what does S4S stand for?**

- a. square on 4 sides
- b. sanded on 4 sides
- c. surfaced on 4 sides
- d. sloped on 4 sides

**4. Certain types of hammers have a serrated head. What is the purpose of the serrations on the head of this type of hammer?**

- a. applies more force to the nail head
- b. the serrations make the nail hold better
- c. keeps the hammer face from slipping off the nail head
- d. makes it easier to get the nail started in the wood



## Sample Question Answers

1. B
2. B
3. C
4. C



## **STUDY GUIDE FEEDBACK**

Please use this page to notify us of any changes in policies, procedures, or materials affecting this guide. Once completed, return to:

Southern California Edison Human Resources - Performance Assessment Services G.O. 4, Ground Floor 8631 Rush St. Rosemead, CA 91770

### **Test Name: 2425 Hydro Structural Carpenter Test**

If you have encountered any discrepancies in the test, please provide an explanation and the page number below.

COMMENTS