STRUCTURAL STEEL INSPECTOR'S WORKBOOK

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Structural Steel Inspector's Workbook
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INTRODUCTION

The Structural Steel Inspector's Workbook, 2014 edition, is written by Bob Shaw of the SSTC and published jointly by the SSTC and the International Code Council. This workbook can be used as a training tool or study guide for structural steel building inspectors, especially for those preparing to take the S1 and/or S2 Special Inspector certification examinations. It may also be used as test material to evaluate the knowledge and skills of structural steel inspectors. The Workbook contains key points for each section, multiple-choice questions, and an answer key at the back with the specific code provision citation. Approximately 400 questions are prepared for study and evaluation.

This workbook provides practical exercises to learn about various codes and standards governing steel building construction. It is suitable for either individual or classroom study. This independent-study format provides a method for the individual to complete the course at his or her own pace. The material is a compilation of multiple-choice questions pertaining to various codes, with an answer key providing specification and section number references. This workbook is not intended to cover the topics of light-gauge metal framing or plan reading.

Progressing through the course, the learner can measure his or her level of knowledge by using the quizzes provided in each study session. The quizzes are designed to help develop the habit of carefully reading specific material in the codes. The questions are not intended to be tricky or misleading; and the individual is not expected to be able to answer all questions without reference to the applicable standard or code.

The answer keys are based upon the codes and specifications governing steel building construction. The question numbers and correct answers are provided, with the code section number given as a reference. In many cases, other pertinent sections of the code should also be studied to gain a full understanding of the solution.

Although participants are encouraged to attain ICC certification for Special Inspection in Structural Bolting (S1) and Structural Welding (S2), this workbook is not intended to provide specific assistance in preparing for an ICC certification examination or to anticipate examination questions.

Questions or comments regarding the content or quizzes in this workbook are welcome. Please contact: Steel Structures Technology Center, Inc., 5277 Leelanau Ct, Howell, MI 48843-5437, info@steelstructures.com.

ABOUT INTERNATIONAL CODE COUNCIL®

The International Code Council is a member-focused association. It is dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes. ICC Evaluation Service (ICC-ES) is the industry leader in performing technical evaluations for code compliance fostering safe and sustainable design and construction.

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ABOUT STEEL STRUCTURES TECHNOLOGY CENTER

The Steel Structures Technology Center is focused on providing consulting services, technical resources and training related to the design, fabrication, erection, inspection and quality of steel-framed structures. Founded in 1990, SSTC has provided training and support to thousands of engineers, fabricators, erectors, inspectors, building officials and others involved in steel buildings, steel bridges and other forms of steel construction.

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WORKBOOK REFERENCES

This workbook references the following industry codes and standards governing steel building construction.

Workbook References	Year of Publication	Used in Chapters
International Code Council®		
International Building Code®	2015 2012 2009	1 - 3 21
Model Program for Special Inspection	2012	2
Special Inspection Manual	2012	3
American Institute of Steel Construction		
Steel Construction Manual, 14th Edition	2011	5 - 9 18
AISC 360-10 Specification for Structural Steel Buildings (in AISC 14th Edition Manual)	2010	5 - 9
AISC 303-10 Code of Standard Practice (in AISC 14th Edition Manual)	2010	6 - 7
AISC 341-10 Seismic Provisions for Structural Steel Buildings	2010	21
AISC 358s2-14 Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications	2014	21
Research Council on Structural Connections		
Specification for Structural Joints Using High-Strength Bolts (in AISC 14th Edition Manual)	2009	8 - 9
American Welding Society		
AWS D1.1 Structural Welding Code - Steel	2010 2008	10 - 15
AWS D1.3 Structural Welding Code - Sheet Steel	2008	16
AWS D1.4 Structural Welding Code - Reinforcing Steel	2011 2005	17
AWS D1.8 Structural Welding Code - Seismic Supplement	2009	21
AWS A2.4 Standard Symbols for Welding, Brazing and Nondestructive Testing	2012 2007	18

Steel Joist Institute		
Standard Specifications and Load and Weight Tables for Steel Joists and Joist Girders, 43rd Edition, including: • SJI-K-2010, Standard Specifications for Open Web Steel Joists, K Series • SJI-LH/DLH-2010, Standard Specifications for Longspan Steel Joists, LH-Series and Deep Longspan Steel Joists, DLH-Series • SJI-JG-2010, Standard Specifications for Joist Girders • SJI-CJ-2010, Standard Specifications for Composite Steel Joists, CJ-Series • SJI-COSP-2010, Code of Standard Practice for Steel Joists and Joists Girders • SJI-CJCOSP-2010, Code of Standard Practice for Composite Steel Joists	2010	19
Steel Deck Institute		
ANSI/SDI QA/QC-2011, Standard for Quality Control and Quality Assurance for Installation of Steel Deck	2011	20
ANSI/SDI C-2011 Standard for Composite Steel Floor Deck - Slabs	2011	20
ANSI/SDI NC-2010, Standard for Non-Composite Steel Floor Deck	2010	20
ANSI/SDI RD-2010, Standard for Steel Roof Deck	2010	20
COSP14, SDI Code of Standard Practice 2014	2014	20

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