

A-7 Piers and Foundations (Commercial)**License Information**

Scope – Installation of piers and foundations using concrete, rebar, and other materials common to the industry. Includes pile driving, excavation, forming and other techniques and equipment common to the industry.

Examination Outline**Closed Book****80 Questions - Three-hour time limit****70% Correct required to pass**

Exam Topic	%
Soils	6
Excavation	5
Compaction	5
Dewatering	3
Earth Retention	5
Grading	3
Driven Piles	10
Board/Augered/Jetted Piles	5
Concrete Structure Forming	8
Reinforcement	6
Piers	1
Concrete	22
Heavy Equipment	3
Safety	10
Measurements and Markings	8

References

The following references were used to create exam questions but **are not allowed** in the testing center.

1. *International Building Code*, 2006, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
2. *Design and Control of Concrete Mixtures*, Fourteenth Edition, 2002, Portland Cement Association, 5420 Old Orchard Road, Skokie, IL 60077-1083, www.cement.org.
3. *Moving the Earth*, Fifth Edition, 2005, McGraw-Hill Publishing, Inc., P.O. Box 182604, Columbus, OH 43272, books.mcgraw-hill.com.

4. *Modern Carpentry*, Eleventh Edition, 2008, Goodheart-Willcox Company, 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.g-w.com.
5. *Principles and Practices of Commercial Construction*, Eighth Edition, 2008, Prentice Hall/Pearson Education, Order Processing Center, P.O. Box 11071, Des Moines, IA 50336-0693, vig.prenhall.com.
6. *Carpentry and Building Construction*, Sixth Edition, 2004, Glencoe Division of McGraw-Hill, Box 543, Blacklick, OH 43004-0544, www.glencoe.com.
7. *Highway Materials, Soils, and Concretes*, Fourth Edition, 2003, Prentice Hall/Pearson Education, Order Processing Center, P.O. Box 11071, Des Moines, IA 50336-0693, vig.prenhall.com.
8. *Soils and Foundations*, Seventh Edition, 2007, Prentice Hall/Pearson Education, Order Processing Center, P.O. Box 11071, Des Moines, IA 50336-0693, vig.prenhall.com.
9. *Placing Reinforcing Bars*, Eighth Edition, 2005, Concrete Reinforcing Steel Institute, Distribution Center, 933 North Plum Grove Road, Schaumburg, IL 60173-4758, www.crsi.org.
10. *Excavation and Grading Handbook*, 2006, Craftsman Book Company, 6058 Corte del Cedro, Carlsbad, CA 92009, www.craftsman-book.com.
11. *State of Arizona OSHA, Safety and Health Standards for the Construction Industry (29 CFR Part 1926)*, 2007, Arizona Industrial Commission, Division of Occupational Safety & Health, Industrial Commission of Arizona, P.O. Box 19070, Phoenix, AZ 85005-9070, www.ica.state.az.us.

For information on how to obtain exam references, please call toll-free 877.624.2562.

Copyrighted Exam Questions

All test questions are the copyrighted property of Prometric Inc. It is forbidden under federal copyright law to copy, reproduce, record, distribute or display these test questions by any means, in whole or in part, without our written permission. Doing so may subject you to severe civil and criminal penalties, including up to five years in prison and/or a \$250,000 fine for criminal violations.