## PALM BEACH COUNTY EXAM DESCRIPTIONS - 2019

## **Table of Contents**

PALIVI BEACH COUNTY EXAIVI DESCRIPTIONS - 20191
ACOUSTICAL/SUSPENDED ACOUSTICAL CEILING
CONTRACTOR2
ALUMINUM SPECIALTIES CONTRACTOR2
BUILDING CONTRACTOR (ENGLISH OR SPANISH)2
BUSINESS AND LAW (ENGLISH OR SPANISH)3
CARPENTRY -FINISH CONTRACTOR3
CARPENTRY CONTRACTOR3
CONCRETE FORMING AND PLACING CONTRACTOR4
COUNTERTOP CONTRACTOR4
DECORATIVE METAL CONTRACTOR4
DEMOLITION CONTRACTOR (ENGLISH OR SPANISH)5
DREDGING AND LAND FILLING CONTRACTOR5
ELECTRICAL CONTRACTOR 20145
ELECTRICAL FIRE ALARM 20146
FABRIC AWNING CONTRACTORS6
FENCE CONTRACTOR6
GARAGE DOOR CONTRACTOR6
GENERAL CONTRACTOR7
GLASS & GLAZING CONTRACTOR8
GUNITE8
HARV CONTRACTOR8
HURRICANE SHUTTER/AWNING CONTRACTOR9
INSULATION CONTRACTOR9
IRRIGATION SPRINKLER CONTRACTOR9
JOURNEYMAN ELECTRICIAN 2014 (ENGLISH OR
SPANISH)10
JOURNEYMAN PLUMBER (ENGLISH OR SPANISH)10
LIGHTNING PROTECTION 201410
LOW VOLTAGE CONTRACTOR 201411
MASONRY (ENGLISH OR SPANISH)11
MASTER RESIDENTIAL ELECTRICAL 201411
PAINTING CONTRACTOR11
PAVER BRICK/PAVER SYSTEMS CONTRACTOR12
PAVING CONTRACTOR12
PLASTERING CONTRACTOR12
PLUMBING CONTRACTOR13
RE-SCREENER/SCREEN REPAIR CONTRACTOR13
REINFORCING STEEL CONTRACTOR14
RENTAL APARTMENT MAINTENANCE REPAIR
TECHNICIAN14 RESIDENTIAL BUILDING CONTRACTOR14
RESIDENTIAL BUILDING CONTRACTOR14

ROOFING CONTRACTOR (ENGLISH OR SPANISH)15
SEAL COATING/STRIPING CONTRACTOR15
SIGN CONTRACTOR (NON-ELECTRICAL)15
SIGN CONTRACTOR ELECTRICAL 201415
STRUCTURAL STEEL ERECTION CONTRACTOR16
SWIMMING POOL CONSTRUCTION CONTRACTOR16
SWIMMING POOL MAINTENANCE & REPAIR
CONTRACTOR16
TENNIS COURT CONTRACTOR17
TILE, TERRAZZO & STONE CONTRACTOR17
UNDERGROUND UTILITIES CONTRACTOR18
WINDOW & DOOR
WOOD FLOORING CONTRACTOR18

# ACOUSTICAL/SUSPENDED ACOUSTICAL CEILING CONTRACTOR

Tests a candidate's knowledge of the installation, repair, alteration and extension of any acoustical or suspended acoustical ceiling.

Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	8

Subject Area	# Quest.
Plan Reading & Estimating	8
Materials	7
Acoustical Installation	10
Safety	5

#### References

Number of Questions

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- <u>Drywall Level 1</u>, 2007. ISBN: 978-0-13-604512-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Drywall Level 2</u>, 2009. ISBN: 978-0-13-604480-2. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org

## **ALUMINUM SPECIALTIES CONTRACTOR**

(A) Aluminum Specialties Contractors are those whose services are limited to the execution of contracts requiring the experience, knowledge and skill necessary for the fabrication, assembling, handling, erection, installation, dismantling, adjustment, alteration, repair, servicing and design work when not prohibited by law, in accordance with accepted engineering data and/or according to manufacturers specifications in the aluminum metal, vinyl and fiberglass screening material construction trade.

(B) The scope of such work shall include and be limited to screened porches, screened enclosures, pool enclosures, preformed panel-post and beam roofs, mobile home panel roof-overs, residential glass window enclosures, vinyl panel window enclosures, single story selfcontained aluminum utility storage structures (not to exceed 500 sq. ft.), siding, soffit, fascia, gutters, hurricane shutters, awnings, railings, decorative metals and aluminum fences. (C). The scope of such work shall include masonry and concrete work and to be limited to foundations, slabs, block kneewalls, and walls not to exceed six (6) feet on a zero lot line property, confined or limited to the aluminum and allied materials construction work. The aluminum specialties contractor, whose services are limited, shall not perform any work that alters the structural integrity of the building including but not limited to, roof trusses, lintels, load bearing walls and foundations. Aluminum specialties contractors shall subcontract to a licensed qualified contractor in the field concerned, all other work specified herein as being the exclusive work of a plumbing, electrical and mechanical contractor.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	7
Concrete & Masonry	7
Carpentry, Windows & Doors	7
Siding, Soffit & Fascia	6
Screen Enclosures	6
Screen Rooms, Carports & Patio Covers	6
Miscellaneous Aluminum Structures & Gutters	5
Safety	6

#### References

30

- AAF Guide to Aluminum Construction in High Wind Areas, 2010. Aluminum Association of Florida, 13165 McCrory Place, Suite 185, Orlando, FL 33432. Available at http://www.aaof.org/. (Also permitted is the Guide to Aluminum Construction in High-Wind Area ASCE7 Supplement to the 2010 Guide)
- Core Curriculum: Introductory Craft Skills Basic Safety, 2009. ISBN: 978-0-136-09875-1. NCCER, 13614 Progress Blvd., Alachua, FL 32615. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Masonry and Sitework for the Residential Contractor, 2nd edition, 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- Residential Home Builder Study Guide. ISBN: 9781323550915.
  Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Study Guide for Residential Carpentry & Repair, 2nd edition, 2014.
  ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## **BUILDING CONTRACTOR (ENGLISH OR SPANISH)**

Building Contractor means a contractor whose services are limited to construction of commercial and single-dwelling or multiple-dwelling residential buildings, which commercial or residential buildings do not exceed three stories in height, and accessory use structures in connection therewith or a contractor whose services are limited to remodeling, repair, or improvement of any size building if the services do not affect the structural members of the building. As regulated under Florida Statute, a person who has passed a competency examination as a Building Contractor may perform these or related tasks or may supervise persons in his employ in the execution of these tasks.

Number of Questions	70
Time allowed (hours)	3

Subject Area	# Quest.
Plan Reading & Estimating	10
Sitework	5
Concrete	11
Masonry	8
Structural Steel	4
Carpentry & Metal Framing	10
Roofing	4
Associated Trades	3

Interior Finishes	4
Exterior Finishes	4
Safety	7

- 2012 Study Guide for Structural Steel, 2012. ISBN: 978-1-269-08432-1.
   Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- ACI 530 Building Code Requirements and Specification for Masonry Structures 2013, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org OR http://www.techstreet.com/searches/16672726 OR amazon.com
- Concrete Finishing Level Two, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Masonry Level Three, 2014. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.
- Study Guide for Commercial Carpentry, 2nd Edition, 2014. ISBN: 978-1-269-78661-4. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## BUSINESS AND LAW (ENGLISH OR SPANISH)

Tests a candidate's knowledge of payroll taxes, workers' compensation, unemployment compensation, lien laws and other laws or subjects that will affect their daily operations as contractors.

Time allowed (hours)	2
Subject Area	# Quest.
Business Organization	2
Licensing	3
Lien laws	2
Tax Laws	5
Safety OSHA	3
Labor Laws	8
Contract Management	9
Project Management	6
Estimating & Bidding	4
Financial Management	5
Risk Management	3

## References

**Number of Questions** 

■ FLORIDA - NASCLA Contractors Guide to Business, Law and Project Management, 1st. ISBN: 1-934234-92-3 OR 978-1-934234-92-1. NASCLA, 23309 N. 17th Drive, Building 1, Unit 110, Phoenix, AZ 85027. Available at www.nascla.org or www.provbookstore.com. Please note, the Florida Business and Law Study Guide for Contractors (published by Prov) is permitted as a substitute.

## **CARPENTRY - FINISH CONTRACTOR**

Carpentry-Finish Contractor are those who have the knowledge and skill to install, maintain, alter or extend finish wood products and their replacement products, including but not limited to paneling, cabinets/shelving, wood countertops, wood flooring, stair treads, risers, handrails, interior doors and frames and all hardware incidental therein, and non-structural incidental framing modifications. Also includes the work of the wood flooring contractor.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Building Materials, Fasteners & Adhesives	7
Windows & Exterior Doors	2
Exterior Finishing	5
Doors & Hardware	5
Interior Trim	7
Cabinet Installation	6
Wood Flooring	8
Safety	4

#### References

50

- Study Guide for Siding & Finish Carpentry, 2012. ISBN: 978-1-256-61081-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Wood Flooring: A Complete Guide to Layout, Installation & Finishing. The Taunton Press, 63 South Main St., P.O. Box 5506, Newton, CT 06470.

## **CARPENTRY CONTRACTOR**

Those who have a knowledge and skill to install, maintain, repair, alter or extend any wood products and their replacement products in or on a building including, but not limited to, rough framing, structural and nonstructural trusses, conventional rafters and metal framing and wooden fencing, including the work of the carpentry-finish contractor.

Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Building Materials, Fasteners & Adhesives	4
Floor Systems	5
Wall & Ceiling Framing	7
Roof Framing	7
Thermal & Moisture Protection	3
Finish Carpentry & Cabinetry	7
Windows, Doors & Stairs	5
Fencing	4
Safety	3

## References

**Number of Questions** 

- Fences and Retaining Walls, 1990. ISBN: 0-934041-53-9. Craftsman Book Company, 6058 Corte Del Cedro, Carlsbad, CA 92009. Available at www.craftsman-book.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Study Guide for Residential Carpentry & Repair, 2nd edition, 2014.
  ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- Study Guide for Siding & Finish Carpentry, 2012. ISBN: 978-1-256-61081-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Wood Flooring: A Complete Guide to Layout, Installation & Finishing. The Taunton Press, 63 South Main St., P.O. Box 5506, Newton, CT 06470.

## **CONCRETE FORMING AND PLACING CONTRACTOR**

Tests a candidate's knowledge of the components, construction and installation of horizontal and vertical formwork, both site built and prefabricated as well as the installation of reinforcement. Includes the placement and finishing of concrete in forms or on grade and shoring and reshoring of horizontal formwork.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	$\epsilon$
Properties of Concrete	$\epsilon$
Preparation for Placement	5
Reinforcement	$\epsilon$
Formwork	5
Placement & Finishing	8
Specialized Installations & Finishes	3
Quality Control & Curing	$\epsilon$
Safety	5

#### References

- ACI 318 Building Code Requirements for Structural Concrete 2014, 2014. ISBN: 978-0-87031-930-3. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org/.
- Concrete Finishing Level One, 1998. ISBN: 978-0-13-010246-1. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Concrete Finishing Level Two, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## **COUNTERTOP CONTRACTOR**

Those who have the knowledge and skill to install, maintain, repair, alter or extend any natural/artificial stone, concrete, wooden countertops including their modern replacement products (Excluding custom fabricated glass).

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Cabinet Installation	4
Countertop Materials	12
Countertop Substrate	8
Countertop Installation	16
Safety	4

#### References

- Core Curriculum: Introductory Craft Skills Basic Safety, 2009. ISBN: 978-0-136-09875-1.
   NCCER, 13614 Progress Blvd., Alachua, FL 32615.
   Available at http://nccer.pearsonconstructionbooks.com.
- <u>Corian, Fabrication Manual</u>. SurfaceNet, LLC, Solid Surface.com, FL. http://www2.dupont.com/Surfaces/en\_US/assets/pdf/Fab-Manual-for-printing.pdf Candidate printed copies are allowed
- Q & A: Expert Answers to Technical Questions. Marble Institute of America, 28901 Clemons Road, Suite 100, Cleveland, OH 44145. Available at www.marble-instatute.com
- Residential Stone Countertop Installation. Marble Institute of America, 28901 Clemons Road, Suite 100, Cleveland, OH 44145. Available at www.marble-institute.com
- <u>The Complete Guide to Cabinets and Countertops.</u> Black and Decker, Quayside Publishing Group DBA Cool Springs Press, 400 First Avenue North Suite 400, Minneapolis, MN 55401. http://www.homedepot.com1591865896/204758064

## **DECORATIVE METAL CONTRACTOR**

Those qualified to fabricate, install, maintain, repair, alter or extend metal railings, columns hand rails and ornamental metals.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Building Codes	10
Plan Reading & Estimating	6
Welding	10
Ornamental Iron	5
Stairs & Railings	11
Safety	8

#### References

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Introduction to Arc Welding. ISBN: 0-13-215108-1. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Miscellaneous/Ornamental Ironworking. ISBN: 978-0-13-292289-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Tools & Equipment of the Trade</u>, 2011. ISBN: 978-0-13-213803-1. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

- <u>Trade Math.</u> ISBN: 978-0-13-266447-9. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Trade Safety</u>, 2011. ISBN: 978-0-13-213801-7. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## **DEMOLITION CONTRACTOR (ENGLISH OR SPANISH)**

Tests a candidate's knowledge of demolition and removal of structures and buildings. Tests a candidate's knowledge of demolition of structural steel, structural concrete, masonry and structural wood framing. Emphasis on cranes and crane safety as well as explosives and explosive safety. Focuses on interpreting plans and understanding of how components of various structures are assembled. Covers single and multi-story buildings and structures of the types mentioned above.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Interpretation	6
Structural Concrete	5
Structural Masonry	5
Structural Framing	4
Structural Steel	6
Blasting	6
Rigging and Cranes	8
Safety	10

### References

- <u>Carpentry Level One</u>, 2006. ISBN: 978-0-13-229268-9. Prentice Hall,
   P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Code of Federal Regulations, Title 29, Part 1926, 2012. ISBN: 9780160911576. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Available at http://bookstore.gpo.gov. Candidate printed versions permitted in testing room if exam is open book. OSHA Standards for the Construction Industry is permitted as a substitute for this book.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Ironworking Level One</u>, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>ISEE Blasters' Handbook</u>. ISBN: 978-1892396006. International Society of Explosives Engineers, 30325 Bainbridge Road, Cleveland, OH 44139. Available at www.isee.org.
- Masonry Level One, 2004. ISBN: 978-0-13-228718-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- NFPA 241 Safeguarding Construction, Alteration and Demolition Operations. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## **DREDGING AND LAND FILLING CONTRACTOR**

Tests a candidate's knowledge of mechanical and hydraulic dredging methods, equipment, sediment disposal and marine safety.

Number of Questions	40
Time allowed (hours)	2

Subject Area	# Quest.
Dredging Principles & Practices	12
Dredging Equipment	12
Regulations	8
Safety	8

#### References

- Code of Federal Regulations, Title 29, Part 1926, 2012. ISBN: 9780160911576. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Available at http://bookstore.gpo.gov. Candidate printed versions permitted in testing room if exam is open book. OSHA Standards for the Construction Industry is permitted as a substitute for this book.
- Code of Federal Regulations, Title 33, Parts 1 124. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Available at www.ecfr.gov. Candidate printed versions permitted in testing room if exam is open book.
- Code of Federal Regulations, Title 33, Parts 125-199. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Available at www.ecfr.gov. Candidate printed versions permitted in testing room if exam is open book.
- Code of Federal Regulations, Title 33, Parts 200 to 499. Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Available at www.ecfr.gov. Candidate printed versions permitted in testing room if exam is open book.
- Fundamentals of Hydraulic Dredging, 1996. ISBN: 9780784401477. American Society of Civil Engineers, 1800 Alexander Bell Drive, Reston, VA 20191. https://www.asce.org/templates/publications-book-detail.aspx?id=7971

## **ELECTRICAL CONTRACTOR 2014**

Those who have the knowledge and skill to install, repair, alter, add to or change any electrical wires, fixtures, appliances, apparatus, raceways, conduit or any part thereof; which generates, transmits, transforms or utilizes electrical energy in any form for light, heat, power or communications, all in compliance with applicable plans, specifications, codes, laws and regulations.

Number of Questions	75
Time allowed (hours)	3

Subject Area	# Quest.
Communication Systems	3
Equipment for General Use	6
General Electrical Knowledge	12
Motors & Controls	4
Plan Reading	4
Special Conditions	4
Special Equipment	3
Special Occupancies	2
Wiring & Protection	17

Wiring Methods & Materials

#### 20

50

#### References

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808.
   McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004.
   Available at www.amazon.com
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## **ELECTRICAL FIRE ALARM 2014**

Tests a candidate's knowledge of the design, installation, maintenance, alteration, and testing of fire alarm circuits and equipment.

Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	4
Installation Requirements Electrical	10
Initiating Devices	12
Notification Appliances & Signaling Circuits	13
Systems Testing	9
Supervisory Stations	2

#### References

Number of Outsitions

**Number of Questions** 

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808.
  McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004.
  Available at www.amazon.com
- Low Voltage Wiring: Security/Fire-Alarm Systems, 2001. ISBN: 978-0071376747. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com.
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- Understanding and Servicing Alarm Systems, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.

## **FABRIC AWNING CONTRACTORS**

Fabric Awning Contractors are those who are qualified to manufacture, install, maintain, repair, alter or extend detachable cloth/synthetic cover material over a rigid metal designed to be used as a protection against sun and weather. Electrical wiring required for the purpose of lighting the awning may be included in the contract for work, but must be subcontracted to a Certified Electrical Contractor.

Time allowed (hours)	2
Subject Area	# Quest.
Building Codes	10
Design, Plan Reading and Estimating	12
Awning Installation & Attachment	19
Safety	9

#### References

- All about Awnings. Professional Awning Manufacturers Association, 1801 County Road B West, Roseville, MN 55113. http://www.awninginfo.com/commercial\_awning\_architects\_resources.html Candidate printed copies allowable
- <u>Carpentry Level One</u>, 2006. ISBN: 978-0-13-229268-9. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Core Curriculum: Introductory Craft Skills Basic Safety, 2009. ISBN: 978-0-136-09875-1. NCCER, 13614 Progress Blvd., Alachua, FL 32615. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org

## **FENCE CONTRACTOR**

Fencing Contractors are those who are qualified to construct, install, maintain, alter, extend or repair fencing, including wood, pre-cast concrete, pre-fabricated fences, child proof barrier (kiddies) fences for pools, mechanical swimming pool covers and gates in compliance with safety, zoning and building codes. Electrical installation may be included in the contract for work but must be subcontracted to a Certified Electrical Contractor.

·	
Subject Area	# Quest.
Plan Reading & Estimating	6
Layout & General Math	6
Wood Fencing	8
Masonry Fencing	10
Metal & Chain Link Fencing	10
Safety	10

#### References

**Number of Questions** 

Time allowed (hours)

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Fences and Retaining Walls, 1990. ISBN: 0-934041-53-9. Craftsman Book Company, 6058 Corte Del Cedro, Carlsbad, CA 92009. Available at www.craftsman-book.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org

## GARAGE DOOR CONTRACTOR

A Garage door installer is a person or firm qualified and certified to install, maintain, repair, alter or extend residential or commercial garage doors, including all hardware and operating devices. One-hundred-twenty-volt electrical installation required for the door operating devices may be included in the contract for work but must be subcontracted to a certified or registered electrical contractor.

Number of Questions 50

50

#### Time allowed (hours)

Subject Area# Quest.Garage Doors Installation18Garage Doors, Materials & Hardware17Garage Door Service, Repair & Maintenance9Safety6

2

#### References

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>TDS 151 General Code Inspection Guidelines for Garage Doors.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book.
- TDS 156 Standard Wood Header and Jamb Detail Guidelines. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 157 Garage Doors and Foam Plastic.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 158 Glazing in Garage Doors.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 160 Sectional Garage Door Terminology</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 161 Connecting Garage Door Jambs to Building Framing.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 162 Wood Door Finishing Guidelines</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 163 Garage Door R-Value.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- TDS 164 Drywall Surfaces and the Mounting of Garage Door Hardware. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book

- <u>TDS 165 Garage Door Manual Operation</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- TDS 166 Guidelines for Connecting a Drawbar Operator to a Sectional Garage Door. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book.
- TDS 167 Sectional Garage Door & Electric Operator Checklist for Home Inspectors and Consumers. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 172 Garage Door Labels</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 179 Wood Garage Door Inspection and Maintenance Guidelines</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- TDS 181 General Code Inspection Guidelines For Wind Load Rated
  Garage Doors. Door and Access Systems Manufacturers Association
  International, 1300 Sumner Avenue, Cleveland, OH 44115-7333.
  Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 182 Technical Considerations for Dock Doors.</u> Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 260 Common Rolling Steel Door Installation Problems</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at http://www.dasma.com/PubTechData.asp. Candidate printed versions allowed if exam is open book
- TDS 270 Recommended Rolling Door Maintenance Practices for

  Building Maintenance Supervisors. Door and Access Systems

  Manufacturers Association International, 1300 Sumner Avenue,
  Cleveland, OH 44115-7333. Available at

  http://www.dasma.com/PubTechData.asp. Candidate printed versions
  allowed if exam is open book

## **GENERAL CONTRACTOR**

Tests a candidate's knowledge of the construction, repair, alteration, remodeling, addition to, subtraction from, improvement, and demolition of any building or structure including related improvements to real estate excluding electrical, mechanical, plumbing, and liquefied petroleum gas work related thereto.

Number of Questions Time allowed (hours)

Subject Area# Quest.Plan Reading & Estimating10Sitework5

80

Concrete	12
Masonry	8
Structural Steel	10
Carpentry & Metal Framing	12
Roofing	4
Associated Trades	2
Interior Finishes	5
Exterior Finishes	5
Safety	7

- 2012 Study Guide for Structural Steel, 2012. ISBN: 978-1-269-08432-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- ACI 530 Building Code Requirements and Specification for Masonry Structures 2013, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org OR http://www.techstreet.com/searches/16672726 OR amazon.com
- <u>Carpentry Level One</u>, 2006. ISBN: 978-0-13-229268-9. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Concrete Finishing Level Two, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Masonry Level Three, 2005. ISBN: 978-0-13-109169-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Study Guide for Commercial Carpentry, 2nd Edition, 2014. ISBN: 978-1-269-78661-4. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## **GLASS & GLAZING CONTRACTOR**

Those who are qualified to select, cut, assemble, and install all makes and kinds of glass and glasswork and execute the glazing of frames, panels, sash and door and holding metal frames, ornamental decoration, mirrors, tub and shower enclosures.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	5
Glass & Glazing	12
Plastic & Glazing	4
Sealants	10
Curtain Walls	6
Structural Glazing Systems	4
Bath Enclosures & Mirrors	4
Safety	5

### References

 Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- GANA Glazing Manual, 50th Anniversary Edition. Glass Association of North America, 800 SW Jackson Street, STE. 1500, Ste. A, Topeka, KS 66612-1200. Available at www.glasswebsite.com.
- GANA Sealant Manual, 2008. Glass Association of North America, 800 SW Jackson Street, STE. 1500, Ste. A, Topeka, KS 66612-1200.

## **GUNITE**

Tests a candidate's knowledge of preparing, forming, mixing, and applying concrete to various surfaces by hydraulic or pneumatic methods.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	5
Preparation for Placement	15
Proportioning and Preconstruction Testing	3
Batching and Mixing	3
Shotcrete Construction	20
Safety	4

#### References

- Concrete Finishing Level One, 1998. ISBN: 978-0-13-010246-1. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Concrete Finishing Level Two, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Guide to Shotcrete, 506R.90, 1995. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. https://www.concrete.org/store.aspx

## **HARV CONTRACTOR**

Tests a candidate's knowledge of the design, installation, maintenance, repair, fabrication, alteration & extension of Ac/refrigeration, piping vessels, warm air heating, low and high pressure boilers, ventilation systems, duct systems, insulation & related appurtenances within a complete system unlimited in horsepower or tonnage.

Number of Questions	100
Time allowed (hours)	4

Subject Area	# Quest.
Piping	18
Equipment	14
Maintenance	22
Plan Reading	7
Systems & Sizing	20
General Knowledge	19

- Advanced Mechanical Study Guide , 2nd edition, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Energy Conservation, 2017. ISBN: 978-1-60983-695-5. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Fuel Gas, 2017. ISBN: 978-1-60983-691-7. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Mechanical, 2017. ISBN: 978-1-60983-690-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>HVAC Basics for Contractors,3rd Edition</u>, 3rd Edition. ISBN: 13:9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- <u>Intermediate Mechanical Study Guide</u>, 2015. ISBN: 9781323725221. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Manual N Commercial Load Calculations, 2008. ISBN: 978-1892765383. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. Available at http://www.acca.org.
- Residential Load Calculations Manual J. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

## **HURRICANE SHUTTER/AWNING CONTRACTOR**

Metal Awning and Storm Shutter Contractor is qualified and certified to fabricate, erect and install awnings or canopies of metal including other materials, incidental thereto, in or on buildings or other structures, and which may be, in whole or part, supported from a building wall erected and provided by others, or may be self-supporting, and including footings or slabs on grade in connection therewith. Such contractor shall have a qualifying agent with experience and skill gained by at least one (1) year's practical work in this field and who has passed a designated examination.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Concrete and Reinforcement	6
Metal Storm Panel Shutters	6
Wood Storm Shutters	5
Installation & Anchorage	16
Building and Municipal Codes	7
Safety	4

### References

 Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.

- <u>Carpentry Level One</u>, 2006. ISBN: 978-0-13-229268-9. Prentice Hall,
   P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Hurricane Shutter Designs</u>. APA The Engineered Wood Association, 7011 S. 19th ST, Tacoma, WA 98466. Available at www.apawood.org Candidate printed versions allowed if exam is open book.

## **Insulation Contractor**

Tests a candidate's knowledge of insulation installation, repair, maintenance and extension to control the gain or loss of heat from all sources in buildings, rooms, pipes, vessels, ducts, process equipment, refrigerated rooms, and boxes. This includes installation, repair, maintenance, and extension of acoustical insulation.

Number of Questions	50
Time allowed (hours)	3

Subject Area	# Quest.
Plan Reading & Estimating	5
Theory	5
Insulation Materials & Accessories	12
Insulation Installation	13
Systems Insulation	10
Safety	5

#### References

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Energy Conservation, 2017. ISBN: 978-1-60983-695-5. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Insulating Level Three</u>, 1999. ISBN: 978-0-13-909458-3. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Insulating Level Two, 1999. ISBN: 978-0-13-909417-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Study Guide for Insulation.
   ISBN: 978-0-136-06315-5.
   Pearson, 501
   Boylston Street, Suite 900, Boston, MA 02116.
   Available at http://nccer.pearsonconstructionbooks.com

## **IRRIGATION SPRINKLER CONTRACTOR**

Install, repair, maintain, alter or extend all piping and sprinkler heads for the irrigation of lawns including incidental connections to a water pump (but not direct connection to potable water lines).

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Planning & Layout	8

Materials	6
Controls	6
Irrigation Installation	10
Cross Contamination & Backflow Prevention	5
Reclaimed Water	4
Safety	5

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Administrative Code, Ch. 62-610, Reuse of Reclaimed Water & Land Application, 2012. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. http://www.dep.state.fl.us/legal/Rules/wastewater/62-610.pdf Candidate printed versions permitted in testing room if exam is open book.
- Florida Building Code 2017 Plumbing, 2017. ISBN: 978-1-60983-689 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Turf Irrigation Manual The Complete Guide to Landscape Irrigation

  Design, 5th Ed., 1994. ISBN: 978-0963509604. Weathermatic, P.O. Box 180205, Dallas, TX 75218-0205. Available at www.amazon.com.

# JOURNEYMAN ELECTRICIAN 2014 (ENGLISH OR SPANISH)

A Journeyman Electrician is qualified and tested to perform work in the electrical trades while employed by a Master Electrician.

Time allowed (hours)	3
Subject Area	# Quest.
General Electrical Theory & Principles	9
Plan Reading	4
Wiring & Protection	14
Wiring Methods & Materials	22
Motors & Controls	3
Equipment for General Use	6
Special Occupancies	2
Special Equipment	3
Special Conditions	3
Communication Systems	4

#### References

**Number of Questions** 

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808.
  McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004.
  Available at www.amazon.com
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## JOURNEYMAN PLUMBER (ENGLISH OR SPANISH)

Perform work under the supervision and in the employ of a state certified plumber or a locally licensed master plumber.

30
3
# Quest.
14
6
10
10
5
8
8
12

ደበ

7

50

#### References

Safety

Number of Questions

- Florida Building Code 2017 Plumbing, 2017. ISBN: 978-1-60983-689 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Plumbing Basics for Contractors, 3rd Edition, 2014. ISBN: 978-1-269-78624-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## **LIGHTNING PROTECTION 2014**

Those who are qualified to install, maintain, repair or alter any lightning protection system, including all terminals, conductors, ground rods, fittings and all other system fastenings, connections and bonding necessary to complete a system designed to protect structures and open spaces. Electrical installation required to make the system operational may be included in the contract for work but must be subcontracted to a Certified Electrical Contractor.

Number of Questions	30
Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	10
Hazardous Structures	5
Heavy Duty Stacks	5
Ordinary Structures	10
Safety	5
Special Occupancies	5
Wind Turbines and Watercraft	5
Explosive Materials	5

#### References

Number of Questions

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- NFPA 780 Standard for the Installation of Lightning Protection Systems, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## **LOW VOLTAGE CONTRACTOR 2014**

Those who are qualified to install, maintain, repair, alter, wire or extend burglar alarm systems and communication and sound systems in single family homes, duplexes, mobile homes, multifamily dwellings, and commercial buildings at less than 98 volts. The scope of work may also include installation of raceways, computer wiring, conduit for private telephone, cable television systems (CCTV), video security systems, intercom, public address systems, and/or landscaping lighting to include plug & play devices but cannot install fire alarm systems. Scope of work must also be compliant of the National Electrical Code (NFPA 70) and Florida Building Code (FBC). Any electrical installation above 98 volts may be included in the contract for work but must be subcontracted to a Certified Electrical Contractor.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.

General Electrical Knowledge	5
Intrusion Detection	15
Acoustical Installation	8
Notification Appliances & Signaling Circuits	8
Communication and Sound	5
Power Supplies	5
Supervisory Stations	4

#### References

- Low Voltage Wiring: Security/Fire-Alarm Systems, 2001. ISBN: 978-0071376747. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com.
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- Understanding and Servicing Alarm Systems, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.
- Wiring Diagrams Pal -The Reference Guide for Electrical Wiring Installations. ISBN: 0-9652171-4-0. Pal Publications, 374 Circle of Progress, Pottstown, PW 19464-3810.

## Masonry (English or Spanish)

Tests a candidate's knowledge of the selection, cutting, and laying of brick, stone, and masonry products. This includes structural glass brick or block, insulated concrete units, and the placement of reinforcing steel, including concrete forming and placing incorporated into the masonry work.

Number of Questions	50	
Time allowed (hours)	2	
Subject Area	# Quest.	
Plan Reading & Estimating	8	
Masonry Units	8	
Mortar	8	
Reinforcement	7	
Masonry Installation	12	
Safety	7	

#### References

- ACI 530 Building Code Requirements and Specification for Masonry Structures 2013, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org OR http://www.techstreet.com/searches/16672726 OR amazon.com
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Study Guide for Masonry Contractors, 2nd Edition, 2014. ISBN: 978-1-269-78558-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

## Master Residential Electrical 2014

Tests a candidate's knowledge of the design, plan, installation, repair, alteration, and maintenance of electric conductors, raceways, and equipment for light, heat, and power in one-, two-, and three-family dwellings.

Number of Questions	65
Time allowed (hours)	3

Subject Area	# Quest.
General Electrical Knowledge	16
Wiring & Protection	13
Wiring Methods & Materials	10
Equipment for General Use	8
Special Occupancies	2
Special Equipment	4
Special Conditions	3
Communication Systems	5
Motors & Controls	4

#### References

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## **PAINTING CONTRACTOR**

Specialty building contractor shall include and be limited to the cleaning, caulking, and sizing of surfaces, including roofs, in preparation for the application of paint and related liquid or viscous products by brush, roller, or spray methods in such a manner that, under an agreed specification, satisfactory painting can be accomplished. A "PU" specialty building contractor is qualified to clean, sandblast, caulk, and prime surfaces in preparation for, and to apply, waterproofing products by brush, roller, or spray method in such a manner that, under agreed specifications, satisfactory waterproofing can be accomplished either inside or outside (vertical surfaces only). A "PU" specialty building contractor is also qualified to clean surfaces in preparation of waterproofing or painting (engraving, cutting, or cleaning glass or stone or removing scale for metals). The scope of work may include pressure spraying to clean exterior surfaces of homes or buildings.

Number of Questions	80
Time allowed (hours)	3

Subject Area	# Quest.
Safety	6
Substrates & Preparation	15
Materials	17
Application	18
Job Planning & Estimating	8
Paint Failures & Remedies	6
Equipment	10

#### References

- Painting Industrial Level 4, 1998. ISBN: 978-0-13-910100-7. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Painting Level One, 1997. ISBN: 978-0-13-771239-7. Prentice Hall, P.O.
   Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Painting Level Three, 1998. ISBN: 978-0-13-949041-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Painting Level Two, 1997. ISBN: 978-0-13-771296-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## PAVER BRICK/PAVER SYSTEMS CONTRACTOR

Tests a candidate's knowledge of interlocking paver units including material selection, site preparation, subbases, bases, installation methods and concrete work related to the paver system.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	8
Soil Characteristics & Compaction	6
Base Materials, Bedding & Edge Restraints	7
Paving Materials	7
Paver Installation	16
Safety	6

#### References

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- ICPI Concrete Paver Installer Course Manual, 7th Edition, 2000. Interlocking Concrete Pavement Institute, 13921 Park Center Road, Suite 270, Herndon, VA 20171. Available at www.icpi.org.

## **PAVING CONTRACTOR**

Those who are qualified with the experience and skill to construct roads, alter or repair, airport runways, parking lots, sidewalks, curbs,

gutters, modular retaining walls, storm drainage facilities, residential driveways, using Portland cement, concrete or asphaltic concrete, paver brick/paver systems and to perform the excavating, clearing and grading incidental thereto. Electrical work for lighting that area may be included in the contract but must be subcontracted to a certified electrical contractor. Scope also includes the work of the Seal Coating/Striping Contractor.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Plans & Specifications	3
Survey & Layout	5
Earthwork, Compaction & Stabilization	5
Asphalt Paving Procedures	7
Asphalt Properties and General Uses	6
Use & Application of Asphalt Emulsions	7
Asphalt Preservation & Maintenance	7
Concrete and Reinforcement	7
Safety	3

#### References

Number of Ougstions

- Damage Prevention Guide. Sunshine State One Call of Florida, Inc., 11 Plantation Road, DeBary, FL 32713. Available at http://www.sunshine811.com/ Candidate printed versions permitted in testing room if exam is open book.
- <u>ES-12 Asphalt Surface Treatments</u>, 1988. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. Available at https://www.contractorcampus.com/.
- <u>Highway/Heavy Construction Level 1</u>. ISBN: 978-0-13-061611-1.
  Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- MS-16 Asphalt in Pavement, Preservation & Maintenance, 4th edition, 2009. ISBN: 978-1-934154-58-8. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. Available at www.asphaltinstitute.org.
- MS-19 Basic Asphalt Emulsion Manual, 4th edition. ISBN: 978-1-934154-56-4. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. Available at www.asphaltinstitute.org.
- Standard Specifications for Road and Bridge Construction. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. Available at www.dot.state.fl.us. Candidate printed versions allowed if exam is open book.

## **PLASTERING CONTRACTOR**

Lathing and Plastering Scope: A lathing and plastering contractor coats surfaces with a mixture of sand, gypsum plaster, quick-lime or hydrated lime and water, or sand and cement and water, or a combination of such other materials that create a permanent coating, including coatings for the purpose of soundproofing and fireproofing. These coatings are applied with a plasterer?s trowel or sprayed over any surface which offers a mechanical means for the support of such coating, and will adhere by suction. This contractor also installs lath (including metal studs) or any other material prepared or manufactured to provide a base or bond for such coating. A lathing and plastering contractor also applies and affixes wood and metal lath, or any other material prepared or manufactured to provide key or suction bases for

the support of plaster coatings. This classification includes the channel work and metal studs for the support of metal or any other lathing material and for solid plaster partitions.

Number of Questions	50 3
Time allowed (hours)	
Subject Area	# Quest.
Plan Reading & Estimating	5
Framing	10
Lathing	10
Materials	10
Application & Finishing	10
Safety	5

#### References

- ASTM C1007-11a Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories, 2011. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at http://www.astm.org/. Candidate printed versions allowed if exam is open book.
- ASTM C1063-12a Standard Specification for Installation of Lathing & Furring to Receive Interior & Exterior Portland Cement Based Plaster, 2012. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at http://www.astm.org/. Candidate printed versions allowed if exam is open book.
- ASTM C926-15b Standard Specification for Application of Portland Cement-Based Plaster, 2015. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at http://www.astm.org/.
- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Gypsum Construction Handbook, 2009. ISBN: 978-0876292587. United States Gypsum Corporation, 350 Burnhamthorpe Road West, 5th Floor, Mississauga, ON. Available at www.amazon.com.
- Introduction to Construction Math, 2009. ISBN: 978-0-13-609877-5.
  Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## **PLUMBING CONTRACTOR**

Those who have the knowledge and skill to install, maintain, repair, alter or extend plumbing, sanitary drainage or storm drainage facilities, venting systems, public and private water supply systems, septic tanks, drainage and supply wells, swimming pool piping; irrigation systems; or solar heating water systems and all appurtenances, apparatus, or equipment used in connection therewith, including boilers and pressure process piping and including the installation of water and storm and sewer lines, water and sewer plants and substations; And who are qualified to install, service, modify, alter or repair apparatus, piping, vents, flues, tanks, tubing, appliances, equipment & L.P. and/or Natural gas systems, unlimited with regards to residential or commercial systems.

Number of Questions	100
Time allowed (hours)	3

Subject Area	# Quest.
Drain, Waste & Vent Systems	15
Fuel Gas Systems	15
Fixtures & Fittings	8
General Knowledge	10
Isometrics & Plan Reading	8
Plumbing Math	6
Safety	6
Storm & Roof Drainage	8
Water Heaters	12
Water Supply and Distribution	12

#### References

- Florida Building Code 2017 Fuel Gas, 2017. ISBN: 978-1-60983-691-7. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Plumbing, 2017. ISBN: 978-1-60983-689 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Plumbing Basics for Contractors, 3rd Edition, 2014. ISBN: 978-1-269-78624-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## RE-SCREENER/SCREEN REPAIR CONTRACTOR

A Re-screener/Screen Repair Contractor is a contractor whose services are limited to re-screening or the removal, repair, and replacement of existing structural elements that are incidental to rescreening; all other structural alterations or repairs must be performed by an appropriately licensed contractor (excluding removable window screens/sliding screen doors).

Number of Questions	25
Time allowed (hours)	1.5

Subject Area	# Quest.
Plan Reading & Estimating	4
Building and Municipal Codes	4
Window and Door Screens	3
Screen Rooms	4
Pool Enclosures	5
Safety	5

#### References

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Building Screen Rooms: Creating Backyard Retreats, Screening in Existing Structures, A Complete How-to Guide, 2004. Sunset books, P.O. Box 62375, Tampa, FL 33662. Available at www.amazon.com
- <u>How to Build & Install a Window Screen.</u> Ehow, FL. available at http://www.ehow.com/how\_5298583\_build-install-windowscreen.html Candidate printed copies allowable
- <u>How to install fiberglass window screens</u>. Ehow, FL. Available at http://www.ehow.com/how\_5043259\_install-fiberglass-window-screens.html Candidate printed copies allowable

- <u>How to Re-screen a Pool Cage</u>. Ehow, FL. Available at http://www.ehow.com/how\_6718471\_re\_screen-pool-cage.html Candidate printed copies allowable
- How to repair a hole in a pool screen. Ehow, FL. Available at http://www.ehow.com/how\_12008987\_repair-hole-pool-screen.html Candidate printed copies allowable
- Palm Beach County Amendments to the 5th edition Florida Building Code 2015. Palm Beach County Contractor Certification, 2300 North Jog Road, West Palm Beach, FL 33411. Available at municodes.com -Candidate printed versions allowed
- Screen-Spline Roller Instructions. Ehow, FL. available at http://www.ehow.com/how\_7593695\_screenspline-rollerinstructions.html
- <u>Tips on rescreening your screen room.</u> Ehow, FL. Available at http://www.ehow.com/list\_6218467\_tips-rescreening-screenroom.html

## **REINFORCING STEEL CONTRACTOR**

Reinforcing Steel Placing Contractor is a contractor qualified and certified to fabricate, place, tie and weld steel reinforcing bars (rods) that are or may be used to reinforce concrete buildings or structures.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	6
Reinforcement Placement	14
Reinforcement Connections	12
Reinforcement Cutting & Bending	5
Rigging Equipment & Practices	5
Safety	8

#### References

- ACI 318 Building Code Requirements for Structural Concrete 2014, 2014. ISBN: 978-0-87031-930-3. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org/.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Reinforcing Ironwork Level One, 2005. ISBN: 978-0-13-228220-8. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.

# RENTAL APARTMENT MAINTENANCE REPAIR TECHNICIAN

Apartment Maintenance Repair technicians are those workers employed by an apartment community or apartment management company of at least 100 apartments at a single location that make minor repairs to existing electric water heaters or to existing electric heating, ventilation and air-conditionsing systems.

Number of Questions	100
Time allowed (hours)	4

Subject Area	# Quest.
Licensing Laws and Municipal Codes	14
Electrical Knowledge	12
HVAC General Knowledge	10
Basic HVAC Maintenance	10
HVAC Control Circuits and Motors	8
HVAC Cooling	8
HVAC Heat Pumps	8
Water Heaters	12
Safety	18

#### References

- Basic Electricity, 2013. ISBN: 0-13-340285-1. Prentice Hall, P.O. Box 11071, I Available at http://nccer.pearsonconstructionbooks.com.
- Basic Maintenance. ISBN: 0-13-378002-3. Prentice Hall, P.O. Box 11071, Des Moir at http://nccer.pearsonconstructionbooks.com.
- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, www.provbookstore.com.
- <u>Control Circuit and Motor Troubleshooting</u>. ISBN: 978-0-13-378109-0. Prentice Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Plumbing, 2017. ISBN: 978-1-60983-689-4. Inter 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Statutes 489.105. State of Florida, 2600 Blair Stone Road M.S. 3500, available
- http://www.leg.state.fl.us/Statutes/index.cfm?App\_mode=Display\_Statute&Searc 0499/0489/Sections/0489.105.html Candidate printed versions will be permitted.
- Leak Detection, Evacuation, Recovery, and Charging. ISBN: 0-13-377998-X. 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbook
- Palm Beach County Apartment Maintenance Technician. Palm Beach County, F http://discover.pbcgov.org/pzb/contractors/Pages/Forms-Licensing.aspx Candida be permitted
- <u>Service Plumbing</u>. ISBN: 0-13-378279-4. Prentice Hall, P.O. Box 11071, Des Moin at http://nccer.pearsonconstructionbooks.com.
- <u>Troubleshooting Cooling.</u> ISBN: 978-0-13-382406-3. Prentice Hall, P.O. Box 150336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Troubleshooting Heat Pumps</u>. ISBN: 978-0-13-378119-9. Prentice Hall, P.O. Box 50336. Available at http://nccer.pearsonconstructionbooks.com.

### RESIDENTIAL BUILDING CONTRACTOR

Residential Contractor means a contractor whose services are limited to construction, remodeling, repair, or improvement of one-family, two-family, or three-family residences not exceeding two (2) habitable stories above no more than one uninhabitable story and accessory use structure in connection therewith. As regulated under Florida Statute, a person who has passed a competency examination as a Residential Contractor may perform these or related tasks or may supervise persons in his employ in the execution of these tasks.

Number of Questions	60
Time allowed (hours)	3

Subject Area	# Quest.
Plan Reading	6
Sitework & Foundations	5
Concrete and Reinforcement	8
Masonry	8
Carpentry	10
Roofing	4
Interior Finishes	5

Exterior Finishes	5	Asphalt Principles & Properties	4
Associated Trades	4	Use & Application of Asphalt Emulsions	18
Safety	5	Asphalt Surface Treatments	18
		Asphalt Preservation & Maintenance	5
eferences		Safety	5

50

### References

- **Basic Safety.** ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2017 Residential, 2017. ISBN: 978-1-60983-692-4. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Masonry and Sitework for the Residential Contractor, 2nd edition, 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- Study Guide for Residential Carpentry & Repair, 2nd edition, 2014. ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## ROOFING CONTRACTOR (ENGLISH OR SPANISH)

Tests a candidate's knowledge of the installation, repair, and replacement of roof coverings, including roof deck insulation, roof coating, painting, covering, use of sheet metal products incidental to roofing work or other related material, and installation of nonstructural decking and siding.

Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	8
Deck & Underlayment	6
Flashing	5
High Slope Roofing	15
Low Slope Roofing	9
Safety	7

#### References

**Number of Questions** 

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Roofing Study Guide, 2018. ISBN: 978132388055. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Core 2015, 27202-13 Roofing Applications, & 27403-14 Advanced Roof Systems. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

## **SEAL COATING/STRIPING CONTRACTOR**

An engineering contractor who has a qualifying agent with the experience and skill gained by not less than one (1) year as a general superintendent for an engineering contractor and/or the education equivalent thereto, or a combination thereof, and qualified and certified to seal driveways and parking lots only; if cracks, holes or any repair is needed, it must be done by a certified paving contractor.

Number of Questions	50
Time allowed (hours)	2

**Subject Area** # Quest.

#### References

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **ES-12 Asphalt Surface Treatments**, 1988. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. https://www.contractorcampus.com/.
- MS-16 Asphalt in Pavement, Preservation & Maintenance, 4th edition, 2009. ISBN: 978-1-934154-58-8. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. Available at www.asphaltinstitute.org.
- MS-19 Basic Asphalt Emulsion Manual, 4th edition. ISBN: 978-1-934154-56-4. The Asphalt Institute, 2696 Research Park Drive, Lexington, KY 40511-8480. Available at www.asphaltinstitute.org.

## SIGN CONTRACTOR (NON-ELECTRICAL)

Tests a candidate's knowledge of installation, repair, and modification of non-electrical signs.

Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading	5
Concrete and Reinforcement	9
Wood	6
Structural Steel	7
Welding	7
Non-Electric Sign	8
Safety	7

#### References

**Number of Questions** 

- Carpentry Level One, Carpentry Fundamentals 2013, 2013. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Carpentry Level Three 2014, 2014. ISBN: 0133823059. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Ironworking Level One, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## SIGN CONTRACTOR ELECTRICAL 2014

The scope of certification includes the structural fabrication including concrete foundation, erection, installation, alteration, repair, service and wiring of electrical signs and outline lighting. The scope of certification shall not include the provision of, or any electrical work

beyond, the last disconnect mean or terminal points. However, a contractor certified under this section may provide the electrical entrance requirements for metering and main disconnect of remote billboards or signs which are independent of any structure or building and which require no more than twenty-five (25) kilowatts at two hundred fifty (250) volts maximum (61G6-7.001).

Number of Questions	40
Time allowed (hours)	2

Subject Area	# Quest.
Basic Electricity & Wiring	6
Electrical Signs & Outline Lighting	16
Grounding & Bonding	4
Motors & Controls	3
Transformers	3
Wiring & Protection	4
Wiring Methods & Materials	4

#### References

- American Electrician's Handbook, 16th Edition. ISBN: 978-0071798808.
  McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004.
  Available at www.amazon.com
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

## STRUCTURAL STEEL ERECTION CONTRACTOR

A Structural Steel Erection Contractor is a contractor qualified and certified to erect structural steel shapes and plates including such minor field fabrication as may be necessary, of any profile, perimeter or cross-section, that are or may be used as structural members for buildings and structures, including steel joists, steel decking and siding, and communication towers, and including riveting, welding and rigging only in connection therewith.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	5
Structural Steel	10
Welding & Cutting	6
Structural Steel-Bolting	4
Metal Decking	6
Metal Buildings	3
Metal Joists & Trusses	5
Rigging and Cranes	6
Safety	5

#### References

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Ironworking Level One</u>, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

- Ironworking Level Three, 2012. ISBN: 978-0-13-257785-4. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Ironworking Level Two</u>, 2011. ISBN: 978-0-13-257822-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

## **SWIMMING POOL CONSTRUCTION CONTRACTOR**

Those who are qualified to excavate, construct, fabricate, install & equip swimming pools, spas and hot tubs and waterfalls, including the pumps, pool heaters, installation of pool heat pumps, filters, chlorinators & that piping incidental to the re-circulating system, including plumbing fixtures and potable water hook up. This contractor may install child proof (kiddie) barrier fences, mechanical swimming pool covers, railings, ladders, the slab for the pool deck, repair of concrete pavement damaged on site during pool installation & replace pigtailed equipment or identical controls & motors that are necessary to the operation of the pool. Such contractors shall subcontract to a qualified contractor in the field concerning all other work specified herein as being the exclusive work of a plumbing, electrical, gas contractor & other subcontractors responsible for the installation of any other required pool safety structure or device.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	4
Site Preparation, Excavation and Backfilling	5
Pool Shell Construction	14
Interior Surface Preparation and Finishing	9
Tile, Coping and Trimwork	4
Accessories, Railings, Ladders, Covers & Waterfalls	4
Care and Operation	6
Safety	4

### References

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Swimming Pools: Design and Construction, Fourth Edition. ISBN: 978-0419235903. Taylor and Francis, 270 Madison Avenue, New York, NY 10016. Available at www.amazon.com.
- <u>Trade Knowledge</u>. Prov, 13614 Progress Blvd., Alachua, FL 32615. This reference is not a book for purchase. This reference represents the general knowledge that a candidate gains through experience in their trade.

## SWIMMING POOL MAINTENANCE & REPAIR CONTRACTOR

Those who are qualified to maintain both public & private pools, spas & hot tubs, both public & private, make minor repairs to existing pool

masonry, such as patching cracks in pool bottoms & walls, repaint, resurface or reline the walls, bottoms of pools & resurface pool decks, install child proof (kiddie) barrier fences, mechanical swimming pool covers, railings, ladders, & perform preventive maintenance to equipment such as filters & chlorinators & to replace pigtailed equipment or identical controls & motors that are incidental to the operation of the pool This contractor may install pool heaters, including solar pool heaters & heat pumps. Such contractor shall subcontract to a qualified contractor all work being the exclusive work of a plumbing, electrical and mechanical contractor.

Number of Questions	50
Time allowed (hours)	3

Subject Area	# Quest.
Calculations	6
Circulation	8
Disinfection	8
Filtration	8
Management	7
Repairs	5
Safety	4
Testing	4

#### References

- Florida Administrative Code, Ch. 64E-9, Public Swimming Pools & Bathing Places, 2009. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. available at http://www.floridahealth.gov/environmental-health/swimming-pools/\_documents/64E-9\_FAC\_Draft\_Rev7\_no\_strike.pdf Candidate printed versions allowed if exam is open book
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Residential, 2017. ISBN: 978-1-60983-692 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Pool & Spa Operator Handbook, 2012. ISBN: 0-9815803-9-5. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. www.nspf.org

## **TENNIS COURT CONTRACTOR**

Those qualified to construct, maintain, or repair tennis courts, including but not limited to the preparation of the surface, drainage, paving, surface topping, concrete, posts, and fencing. Lighting installation may be included in the contract for work but must be subcontracted to a Certified Electrical Contractor.

Number of Questions	50
Time allowed (hours)	2

Subject	Area				# Quest.
Plan Rea	iding & E	stimating			4
Siteworl	<				10
Tennis C	ourts				12
Tennis C	ourt Acc	essories			5
Tennis	Court	Repair,	Reconstruction	&	5
Renovat	ion				

Tennis Court Surfacing Systems	6
Fencing	5
Safety	3

#### References

- <u>Damage Prevention Guide</u>. Sunshine State One Call of Florida, Inc., 11
   Plantation Road, DeBary, FL 32713. Available at http://www.sunshine811.com/ Candidate printed versions permitted in testing room if exam is open book.
- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Study Guide for General Engineering, 3rd edition, 2014. ISBN: 978-1-269-78657-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- Tennis Courts A Construction and Maintenance Manual 7th Edition,
  7th. ISBN: 478-1-9860051-1-7. American Sports Builders Association
  and United States Tennis Association, 8480 Baltimore National Pike
  #307, Ellicott City, MD 21043.
  http://sportsbuilders.org/publications/index.cfm

## **TILE, TERRAZZO & STONE CONTRACTOR**

Tile, Terrazzo, and Stone Contractors are those who are qualified to install, prepare the base, including but not limited to backing material set, repair, regrout, removal/replacement and refinish, tile, terrazzo and marble, and any natural or artificial stone, to install laminate or non-nailable wood flooring and all stone and tile countertops.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	4
Substrates	8
Materials	6
Layout & Planning	4
Ceramic Tile Installation	8
Marble Installation	4
Stone Installation	3
Ceramic Tile Replacement & Regrouting	4
Terrazzo	5
Safety	4

#### References

- American National Standards Specifications for the Installation of Ceramic Version 2011.1. American National Standards Institute, 25 West 43rd Street, 4th New York, NY 10036. Available at http://www.tcnatile.com/.
- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moine 50336. Available at www.provbookstore.com.
- Q & A: Expert Answers to Technical Questions. Marble Institute of America, 2 Clemons Road, Suite 100, Cleveland, OH 44145. Available at www.mainstatute.com
- Residential Stone Countertop Installation. Marble Institute of America, 2 Clemons Road, Suite 100, Cleveland, OH 44145. Available at www.marble-institute
- <u>Setting Tile</u>, 1995 copyright. ISBN: 978-1561580804. Taunton Press, 63 South Street, P.O. Box 5506, Newtown, CT 06470-5506. Available at www.taunton.com.

■ TCNA Handbook for Ceramic, Glass, and Stone Tile Installation. Tile Council of Study Guide for Siding & Finish Carpentry, 2012. ISBN: 978-1-256-America, 100 Clemson Research Blvd., Anderson, SC 29625. Available1081-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. www.tcnatile.com. Available at www.provbookstore.com.

25

Number of Questions

- Terrazzo Specifications and Design Guide, 1999. National Terrazzo and Mosaic Association, 110 East Market St., Leesburg, VA 20176. Available at http://naterrazzo.com/documents/Terrazzo\_Specifications\_\_amp\_\_Design\_G Candidate printed versions allowed if exam is open book.
- Katy, TX 77449. Available at mistflowerpress.com/index.html.

## **UNDERGROUND UTILITIES CONTRACTOR**

Tests a candidate's knowledge of the installation, maintenance, repair, alteration, and extension of underground utilities.

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	6
Survey & Layout	4
Sitework	15
Underground Piping Materials & Fittings	7
Underground Pipe Assembly & Installation	8
Safety	10

#### References

- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Installation Guide for Ductile Iron Pipe, 2015. Ductile Iron Research Association, 245 Riverchase Pkwy East, Ste. O, Birmingham, AL 35244. Available at http://www.dipra.org/publications/
- Study Guide for Utilities Contractors, 2nd edition, 2014. ISBN: 978-1-269-78571-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

## WINDOW & DOOR

Those who are qualified to install, repair, replace or alter windows and doors including hardware in connection therewith. This contractor shall not effect structural changes (Rev 1/1/2013)

Time allowed (hours)	1.5
Subject Area	# Quest.
Building Codes	4
Doors & Windows	14
Plan Reading & Estimating	4
Safety	3

#### References

**Number of Questions** 

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Florida Building Code 2017 Residential, 2017. ISBN: 978-1-60983-692-4. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org

## **WOOD FLOORING CONTRACTOR**

■ <u>Tile Your World</u>, 2003. ISBN: 0-9742754-3-3. Mistflower Press, 6717 Mistflower Wared Flooring Contractor must demonstrate knowledge: all local/state/federal regulations and codes, as well as demonstrate proficiency in the installation and repair of laminate, parquet, wood strips, nail and non-nailed wood flooring and prefinished flooring which is prefabricated or cast-in place. Including but not limited to subflooring and finishing.

Number of Questions	23
Time allowed (hours)	1
Subject Area	# Quest.
Flooring Finishing	3
Flooring Installation	6
Flooring Materials & Accessories	4
Troubleshooting	3
Job Preparation	4
Subflooring	5
References	

- Florida Building Code 2017 Building, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- Wood Flooring: A Complete Guide to Layout, Installation & Finishing. The Taunton Press, 63 South Main St., P.O. Box 5506, Newton, CT 06470.