# **POLK COUNTY - EXAM DESCRIPTIONS**

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# **ALUMINUM STRUCTURES & SPECIALTIES**

A contractor whose services consist of the installation, fabrication, maintenance (except for cleaning), repair or design with aluminum, vinyl and fiberglass screen material. The aluminum contractor may work on foundation, slabs on grade and block knee walls, wood decks (self-standing) and utility sheds (wood studs only) less than 501 square feet, necessary to and incidental to the aluminum construction work. The aluminum contractor shall not perform any work that alters the structural integrity of the building and shall not use wood products for rafters, trusses and wood beams.

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	8
Concrete & Masonry	7
Carpentry, Windows & Doors	7
Siding, Soffit & Fascia	5
Screen Enclosures	6
Screen Rooms, Carports & Patio Covers	6
Miscellaneous Aluminum Structures & Gutters	6
Safety	5

- 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 )
- ASTM D4756-06 Standard Practice for Installation of Rigid PVC Siding <u>& Soffit</u>, 2006. 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.
- 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>Masonry and Sitework for the Residential Contractor, 2nd edition,</u> 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- <u>Residential Home Builder Study Guide</u>. 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 Time allowed (hours)	70 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

#### References

- 2012 Study Guide for Structural Steel, 2012. ISBN: 978-1-269-08432-Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. 1. 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

# **BURGLAR & FIRE ALARM ELECTRICAL 2011**

Tests a candidate's knowledge of the design, plan, installation, repair, alteration, and maintenance of intrusion detection, fire detection, and signaling systems.

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

General Electrical Knowledge	5
Fire & Intrusion Detection & Alarms	24
Power Supplies	5
Notification Appliances & Signaling Circuits	5
Grounding & Bonding	4
Raceways & Boxes	3
Conductors & Cables	3
Special Occupancies	1

#### References

- **American Electricians' Handbook,** 15th Edition. ISBN: 978-0-07-149462-5. 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, 2011. 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.

#### **BURGLAR ALARM ELECTRICAL 2011**

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

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
General Electrical Knowledge	5
Installation	10
Power Supplies	5
Intrusion Detection	17
Notification Appliances & Signaling Circuits	9
Supervisory Stations	4

#### References

- American Electricians' Handbook, 15th Edition. ISBN: 978-0-07-149462-5. 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, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

 <u>Understanding and Servicing Alarm Systems</u>, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.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.

Number of Questions Time allowed (hours)	50 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 & Bidding4Financial Management5Risk Management3

# References

# 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.

# **COMMERCIAL SWIMMING POOL**

Shall include the construction, repair, water treatment, and servicing of any swimming pool or hot tub or spa, whether public or private or otherwise, regardless of use. The scope of such work includes layout, excavation, operation of construction pumps for dewatering purposes, steelwork, installation of light niches, construction of floors, guniting, fiber glassing, installation of tile and coping, installation of all perimeter and filter piping, installation of all filter equipment and chemical feeders of any type, plastering of the interior, construction of decks (slabs incidental to the pool), construction of equipment rooms or housing for pool equipment, and installation of package pool heaters. (However, the scope of work of such Contractor shall not include direct connections to a sanitary sewer or to potable water lines.) Such Contractors may contract for screen enclosures if a sublicensed specialist performs such work, and contracted with pool work.

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	10

Tile, Coping and Trimwork	4
Accessory Work	3
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.

#### **DEMOLITION (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

- <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
- 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.
- ISEE Blasters' Handbook. ISBN: 978-1892396006. International Society of Explosives Engineers, 30325 Bainbridge Road, Cleveland, OH 44139. Available at www.isee.org.

- <u>Masonry Level One</u>, 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
   <u>Operations</u>. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

# **ELECTRICAL SIGN CONTRACTOR 2011**

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.

Subjectivited	
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

- <u>American Electricians' Handbook</u>, 15th Edition. ISBN: 978-0-07-149462-5. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

### **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.

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

Subject Area	" Questi
Building Codes	10
Design, Plan Reading and Estimating	12
Awning Installation & Attachment	19
Safety	9
Awning Installation & Attachment	19

#### References

- <u>All about Awnings</u>. Professional Awning Manufacturers Association, 1801 County Road B West, Roseville, MN 55113. http://www.awninginfo.com/commercial\_awning\_architects\_resources.ht ml Candidate printed copies allowable
- Carpentry Level One, 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

#### GARAGE DOOR INSTALLER 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
Time allowed (hours)	2
Subject Area	# Quest.
Garage Doors Installation	18
Garage Doors, Materials & Hardware	17
Garage Door Service, Repair & Maintenance	9
Safety	6

- 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
- **TDS 151 General Code Inspection Guidelines for 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.
- 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
- TDS 157 Garage Doors and Foam Plastic.
   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
   Source
   Available
   Available
   Available
- TDS
   158 Glazing in 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

- TDS 160 Sectional Garage Door Terminology. 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 161 Connecting Garage Door Jambs to Building Framing. 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 162 Wood Door Finishing 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
   Source
   Avenue,
   Candidate
   Candidate
- TDS
   163 Garage Door R-Value.
   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
   Source
   Available
   Available
   Available
- **TDS 164 Drywall Surfaces and the Mounting of Garage Door** <u>Hardware</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 165 Garage Door Manual Operation.
   Door and Access Systems

   Manufacturers
   Association
   International,
   1300
   Summer
   Avenue,

   Cleveland,
   OH
   44115-7333.
   Available
   at

   http://www.dasma.com/PubTechData.asp.
   Candidate
   printed
   versions

   allowed if exam is open book
   Source
   Available
   Available
   Available
- 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
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   allowed if exam is open book
   Source
   Available
   Available
   Available
- TDS
   172 Garage Door Labels.
   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
   Source
   Available
   Available
- TDS 179 Wood Garage Door Inspection and Maintenance 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
- 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
- TDS 182 Technical Considerations for Dock Doors.Door and AccessSystems Manufacturers Association International, 1300 Sumner Avenue,<br/>Cleveland, OH 44115-7333.Available at

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

- TDS 260 Common Rolling Steel Door Installation Problems. 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<br/>Building Maintenance Supervisors.Door and Access SystemsManufacturersAssociation International, 1300Sumner Avenue,<br/>Avenue,<br/>Cleveland, OH 44115-7333.Available at<br/>http://www.dasma.com/PubTechData.asp.<br/>Candidate printed versions<br/>allowed if exam is open book

# GENERAL CONTRACTOR (ENGLISH OR SPANISH)

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	80
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	10
Sitework	6
Concrete	12
Masonry	8
Structural Steel	7
Carpentry & Metal Framing	12
Roofing	5
Associated Trades	3
Interior Finishes	5
Exterior Finishes	6
Safety	6

- 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 <u>Structures 2013</u>, 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.
- <u>Concrete Finishing Level Two</u>, 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
- <u>Masonry Level Three</u>, 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

### **IRRIGATION SPRINKLER (ENGLISH OR SPANISH)**

A Master Lawn Sprinkler is qualified and certified to install, maintain, repair, alter or extend a lawn sprinkling system and appliances and devices used in connection with such systems, except that such systems shall not include the drilling of wells or the connecting of such systems to potable water. Sprinkler and irrigation systems used for agricultural purposes shall not be included within the scope of this subsection.

Number of Questions	50
Time allowed (hours)	2

Subject Area Plan Reading & Estimating	<b># Quest.</b> 6
Planning & Layout	8
Materials	6
Controls	6
Irrigation Installation	10
Cross Contamination & Backflow Prevention	5
Reclaimed Water	4
Safety	5

#### References

- 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 4. 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 2011**

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

Number of Questions	70
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

### References

- <u>American Electricians' Handbook</u>, 15th Edition. ISBN: 978-0-07-149462-5. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2011. 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.

Number of Questions Time allowed (hours)	80 3
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fixtures & Fittings	6
General Knowledge	10
Isometrics & Plan Reading	10
Plumbing Math	5
Storm & Roof Drainage	8
Water Heaters	8
Water Supply and Distribution	12
Safety	7

#### References

- 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

#### JOURNEYMAN PLUMBING WITH GAS

Tests a candidate's knowledge of the installation, repair, maintenance, and extension of any plumbing system, including drains, waste, sanitary vents, water supply, fixtures, and indirect wastes; installation, repair, and maintenance of gas piping systems, including gas piping, appliances, vents, flues, tanks, and other related appurtenances.

Number of Questions Time allowed (hours)	100 2
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fixtures & Fittings	7
General Knowledge	10
Isometrics & Plan Reading	10
Plumbing Math	11
Storm & Roof Drainage	8
Water Heaters	7

Water Supply and Distribution	12
Fuel Gas Systems	14
Safety	7

### 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

# LOW VOLTAGE (ENGLISH OR SPANISH) 2011

Qualified and certified to install, fabricate, erect, repair, alter, add to or change any electrical wiring, fixtures, appliances, thermostats, apparatus, raceways and conduit, or any part thereof, not to exceed ninety-eight (98) volts, which generates, transmits, transforms or utilizes electrical energy, when those items are for the purpose of transmitting any form of light, heat or communications, including but not limited to telephone, radio, computer and data. A low voltage specialty electrical contractor may connect to an existing separate circuit of approved capacity, which is terminated in an approved outlet, junction box or fused disconnect within six (6) feet of the equipment to be energized.

Number of Questions	50
Time allowed (hours)	2

Subject Area	<b># Quest.</b>
General Electrical Knowledge	12
Wiring & Protection	4
Wiring Methods & Materials	10
Equipment for General Use	6
Special Occupancies	6
Special Equipment	3
Special Conditions	4
Communication Systems	5

#### References

- American Electricians' Handbook, 15th Edition. ISBN: 978-0-07-149462-5. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- <u>Understanding and Servicing Alarm Systems</u>, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.

# MARINE CONSTRUCTION

Marine Contractors are those who are qualified with the experience and skill to construct, maintain, alter, install or repair seawalls, bulkheads, revetments, docks, piers, wharfs, groins, boat lifts, davits and other marine structures, including pile driving.

Number of Questions	75
Time allowed (hours)	3

Subject Area Carpentry Florida Building Code application to Marine	<b># Quest.</b> 10 10
Structures	
Piles	10
Plan Reading & Estimating	6
Safety	9
Sitework	10
Structures	10
Concrete and Reinforcement	10

- 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.
- DESIGN OF COASTAL REVETMENTS, SEAWALLS, AND BULKHEADS, 1995. US Army Corps of Engineers, Washington, DC. Available at http://www.delmar.ca.us/DocumentCenter/View/1899 Candidate printed versions permitted in testing room if exam is open book.
- FLDOT Structures Detailing Manual, 2013, 2013. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. http://www.dot.state.fl.us/structures/StructuresManual/CurrentRelease/V ol2 SDM.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
- 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-bookdetail.aspx?id=7971
- Pile Design and Construction Practice, 5th. ISBN: 978-0415385824. Taylor and Francis, 270 Madison Avenue, New York, NY 10016. Available at www.Contractor-books.com
- Standard Specifications for Road and Bridge Construction, 2013. 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.
- <u>Study Guide for General Engineering, 3rd edition</u>, 2014. ISBN: 978-1-269-78657-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- The Dock Manual: Designing/Building/Maintaining, 1999. ISBN: 978-1-58017-098-7. Storey Publishing, 210 MASS MoCA Way, North Adams, MA 01247. https://www.storey.com/books/the-dock-manual/#

# MARINE CONTRACTOR I

Marine Contractor I means any person or firm qualified and certified by the Board to perform any work involving the construction, repair, alteration, extension and excavation for docks, seawalls, bulkheads, piers, wharfs, boatlifts and other marine structures, including pile driving, wood framing and roofing in conjunction with the erection of wood structures being constructed consistent with the marine work that is being done. This wood structure is not to be used for habitation or office space. He may do such concrete work as may be necessary and incidental to his work in compliance with the building code and other applicable codes and regulations.

Number of Questions Time allowed (hours)	75 2
Subject Area	# Quest.
Plan Reading & Estimating	6
Sitework	10
Piles	10
Florida Building Code application to Marine	10
Structures	
Structures	10
Carpentry	10
Concrete and Reinforcement	10
Safety	9

#### 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.
- DESIGN OF COASTAL REVETMENTS, SEAWALLS, AND BULKHEADS, 1995. US Army Corps of Engineers, Washington, DC. Available at http://www.delmar.ca.us/DocumentCenter/View/1899 Candidate printed versions permitted in testing room if exam is open book.
- FLDOT Structures Detailing Manual, 2013, 2013. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. http://www.dot.state.fl.us/structures/StructuresManual/CurrentRelease/V ol2 SDM.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
- 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-bookdetail.aspx?id=7971
- Pile Design and Construction Practice, 5th. ISBN: 978-0415385824. Taylor and Francis, 270 Madison Avenue, New York, NY 10016. Available at www.Contractor-books.com
- Standard Specifications for Road and Bridge Construction, 2013. 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.
- 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
- The Dock Manual: Designing/Building/Maintaining, 1999. ISBN: 978-1-58017-098-7. Storey Publishing, 210 MASS MoCA Way, North Adams, MA

01247. https://www.storey.com/books/the-dock-manual/#

# MASTER AC (LIMITED) (ENGLISH OR SPANISH)

Tests a candidate's knowledge of the design, installation, maintenance, repair, fabrication, alteration, and extension of air conditioning, refrigeration, heating, ventilation, duct systems, piping vessels, insulation, and related appurtenances within a complete system, limited to 25 tons cooling and 500,000 BTU heating.

Number of Questions Time allowed (hours)	100 4
Subject Area	# Quest.
General Knowledge	18
Piping	19
Systems & Sizing	20
Equipment	15
Maintenance	23
Plan Reading	5

#### References

- <u>Advanced Mechanical Study Guide , 2nd edition</u>, 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
- HVAC Basics for Contractors,3rd Edition, 3rd Edition. ISBN: 13:9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Intermediate Mechanical Study Guide, 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.
- <u>Residential Load Calculations Manual J</u>. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

# MASTER AC (UNLIMITED) (ENGLISH OR SPANISH)

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

#### References

- 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
- HVAC Basics for Contractors,3rd Edition, 3rd Edition. ISBN: 13:9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Intermediate Mechanical Study Guide, 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.
- <u>Residential Load Calculations Manual J.</u> Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

# MASTER ELECTRICIAN (ENGLISH OR SPANISH) 2011

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.
General Electrical Knowledge	12

Communication Systems	3
Equipment for General Use	6
Motors & Controls	4
Plan Reading	4
Special Conditions	4
Special Equipment	3
Special Occupancies	2
Wiring & Protection	17
Wiring Methods & Materials	20

# References

- <u>American Electricians' Handbook</u>, 15th Edition. ISBN: 978-0-07-149462-5. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com
- NFPA 70 National Electrical Code, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

# MASTER MECHANICAL

Master Mechanical shall mean any person whose services are unlimited in the execution of contracts requiring the experience, knowledge, and skill to perform the following; install maintain, repair, fabricate, alter, extend or design (when not prohibited by law) central air conditioning, refrigeration, heating and ventilation (including duct work in connection with a complete system only to the extent such duct work is performed by the Contractor necessary to make complete an air distribution system) boiler and unfired pressure vessel systems, lift stations, equipment and piping and all appurtenances, apparatus, or equipment used in connection therewith; also piping, insulation of pipes, vessels and ducts, pressure and process piping, pneumatic control piping, gasoline tanks and pump installation and piping for same, fire sprinkling systems and standpipes, air piping, vacuum line piping, oxygen lines, nitrous oxide piping, ink and chemical lines, fuel transmission lines and installation of a condensate drain from an air conditioning unit to an existing safe waste or other approved disposal other than a direct connection to a sanitary system, all in such a manner to comply with all plans, specifications, codes, laws and regulations applicable thereto. The scope of work for such Contractor shall not include any work such as liquefied petroleum or natural gas fuel lines within buildings, potable waterlines or connections thereto, sanitary sewer lines, swimming pool piping and filters and electrical power wiring.

Number of Questions	100
Time allowed (hours)	4

Subject Area	# Quest.
General Knowledge	16
Piping	12
Systems & Sizing	31
Equipment	16
Maintenance	16
Plan Reading	9

#### References

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
- HVAC Basics for Contractors,3rd Edition, 3rd Edition. ISBN: 13:9781323725146. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Intermediate Mechanical Study Guide, 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.
- <u>Residential Load Calculations Manual J.</u> Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

# MASTER PLUMBER WITH GAS (ENGLISH OR SPANISH)

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 2010 Fuel Gas, 2010. ISBN: Item #:5661L10. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at www.iccsafe.org.
- Florida Building Code 2010 Plumbing, 2010. ISBN: Item #:5621L10. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Available at 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

### **MASTER SHEET METAL**

Sheet Metal Contractor is a specialty mechanical contractor qualified and certified to manufacture, assemble, cast, cut, shape, stamp, forge, fabricate, weld, repair, recondition, adjust and install sheet and rolled metal of any kind or combination and all other materials used in lieu thereof, and including all air-veyor systems and air handling systems regardless of materials used including all equipment and all reinforcements in connection therewith.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading, Estimating & Math	8
Code & General Knowledge	13
Layout & Fabrication	12
Installation	10
Air Properties & Distribution	8
Air Distribution Accessories	8
Chimneys, Flues & Exhaust	6
Architectural Sheet Metal	4
Safety	6

#### References

- 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
- Sheet Metal Level Four, 2009. ISBN: 978-0-13-609964-2. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Sheet Metal Level One, 2008. ISBN: 978-0-13-604482-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Sheet Metal Level Three</u>, 2009. ISBN: 978-0-13-609962-8. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Sheet Metal Level Two, 2008. ISBN: 978-0-13-604484-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

#### **REMODELING CONTRACTOR**

Tests a candidate's knowledge of residential building remodeling, including foundations, framing, trusses, sheathing, paneling, trim, cabinetry, doors, windows, and stairs. Does not include electrical, plumbing, or foundation installation or repair.

Number of Questions	60
Time allowed (hours)	3

Subject Area	# Quest.
Plan Reading & Estimating	5
Sitework & Foundations	4
Concrete and Reinforcement	4
Masonry	4
Carpentry	12
Roofing	6
Interior Finishes	6
Exterior Finishes	6
Associated Trades	8
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 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
- <u>Residential Home Builder Study Guide</u>. ISBN: 9781323550915. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- <u>Study Guide for Residential Carpentry & Repair, 2nd edition</u>, 2014.
   ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

# **RESIDENTIAL 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
Associated Trades	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 Residential, 2017. ISBN: 978-1-60983-692-4. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Masonry and Sitework for the Residential Contractor, 2nd edition,</u> 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- <u>Residential Home Builder Study Guide</u>. ISBN: 9781323550915. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- <u>Study Guide for Residential Carpentry & Repair, 2nd edition</u>, 2014.
   ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

#### **RESIDENTIAL SWIMMING POOL**

Tests a candidate's knowledge of the construction, service, and repair of residential swimming pools. Does not include direct connections to a sanitary sewer system nor to potable water lines, nor the grounding and bonding of metal surfaces, nor the making of any electrical connections.

Number of Questions	51
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	5
Site Preparation, Excavation and Backfilling	6
Pool Shell Construction	14
Interior Surface Preparation and Finishing	6
Tile, Coping and Trimwork	5
Accessory Work	5
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.
- Builder's Guide to Swimming Pool Construction, 2005. ISBN: 978-1889892504. Builder's Book, Inc., 8001 Canoga Avenue, Canoga Park, CA 91304. Available at www.amazon.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

# **ROOFING (ENGLISH OR SPANISH)**

A Roofing Contractor is a contractor qualified and certified to install, repair and replace roof systems, as defined in the South Florida Building Code, and the waterproofing thereof. Work may include, but shall not be limited to, roof deck insulation, roof coating, painting and covering, including use of sheet metal and installation of other sheet metal products incidental to roofing work, including gutters and downspouts, and other material in connection therewith or any combination thereof and including installation of nonstructural decking and siding. During the repair or replacement process of a roof

system, a roofing contractor shall be allowed to repair and/or replace damaged decking and/or damaged wood structural or nonstructural members of the roof framing, provided that such replacement and/or repair conforms to the requirements of the South Florida Building Code and the repair or replacement of damaged decking and wood structural or nonstructural members of the roof framing constitutes less than fifty (50) percent of the value of the total work performed.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Deck & Underlayment	6
Flashing	5
High Slope Roofing	15
Low Slope Roofing	9
Plan Reading & Estimating	8
Safety	7

# References

- Core 2015, 27202-13 Roofing Applications, & 27403-14 Advanced Roof Systems. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- 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.

# **ROOFING UNLIMITED**

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.

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	8
Deck & Underlayment	6
Flashing	5
High Slope Roofing	15
Low Slope Roofing	9
Safety	7

#### 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
- 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.

# SIDING, WINDOWS & DOORS

Tests a candidate's knowledge of siding, window and door installation including vinyl, wood or aluminum siding, soffit, fascia, gutters and all types of windows and doors. This includes the work necessary to prepare or repair the substrate to accomplish proper installation. Does not include any structural alterations.

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	6
Building Materials, Fasteners & Adhesives	4
Windows & Exterior Doors	6
Thermal & Moisture Protection	8
Exterior Finishing	15
Doors & Hardware	6
Safety	5

## References

2

- 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 Siding & Finish Carpentry, 2012. ISBN: 978-1-256-61081-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

# SIGN CONTRACTOR (NON-ELECTRIC)

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

Number of Questions Time allowed (hours)	49 2
Subject Area	# Quest.
Plan Reading	5
Concrete and Reinforcement	9
Wood	6
Structural Steel	7
Welding	7
Non-Electric Sign	8
Safety	7

- 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. 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
- 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.

# **SOLAR WATER HEATING CONTRACTOR**

Tests a candidate's knowledge of the installation, alteration, repair, and replacement of any solar heating system including swimming pool applications. Includes collectors, storage and expansion tanks, heat exchangers, piping, valves, pumps, sensors, and low voltage controls that connect to existing plumbing and electrical circuits.

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

Plan Reading & Estimating	5
Florida Building Code application to Solar	5
Heating	
Solar Concepts	6
Solar Water Heating Systems	6
Solar Water Heating System Installation	6
Solar Water Heating System Troubleshooting	6
Swimming Pool Heating Systems	6
Materials	5
Safety	5

#### References

- 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 Mechanical, 2017. ISBN: 978-1-60983-690 0. 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
- Solar Water and Pool Heating Manual, 2006. ISBN: FSEC-IN-24. University of Central Florida - UCF FL Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703. https://secure.fsec.ucf.edu/fsecstore/do/product/Publications/SWPHMan ual

# SWIMMING POOL MAINTENANCE UNLIMITED

Swimming Pool Maintenance Contractor (unlimited) is a contractor qualified and certified to do the work of a swimming pool maintenance contractor (limited) and is covered by the same definition except that the swimming pool maintenance contractor (unlimited) shall be able to carry on all such work in connection with both private and public pools.

Number of Questions Time allowed (hours)	75 3
Subject Area	# Quest.
Calculations	9
Circulation	10
Disinfection	10
Filtration	14

Management	7
Repairs	5
Safety	10
Testing	10

#### References

- Florida Administrative Code, Ch. 64E-9, Public Swimming Pools & <u>Bathing Places</u>, 2009. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. available at http://www.floridahealth.gov/environmental-health/swimmingpools/\_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: 978-1-60983-692-4. 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

# UNDERGROUND UTILITIES

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

- Basic Safety. 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/
- <u>Study Guide for Utilities Contractors, 2nd edition</u>, 2014. ISBN: 978-1-269-78571-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com