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ACOUSTICAL CEILINGS

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

Number of Questions	30
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	8
Materials	7
Acoustical Installation	10
Safety	5

References

- 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 CONSTRUCTION

Tests a candidate's knowledge of the fabrication, installation, repair, alteration, and extension of aluminum structures, including screen rooms with solid or screen roofs, metal siding, soffits, gutters, and awnings.

Time allowed (hours)	_
Subject Area	# Quest.
Carports & Patio Covers	7
Miscellaneous Aluminum Structures	7
Plan Reading & Estimating	10
Safety	6
Screen Rooms	10
Screen Enclosures	10

References

Number of Questions

- 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)
- 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

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

References

50

- <u>2012 Study Guide for Structural Steel</u>, 2012. ISBN: 978-1-269-08432 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

BURGLAR & FIRE ALARM ELECTRICAL 2014

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

- <u>American Electrician's Handbook</u>, 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.

BURGLAR ALARM ELECTRICAL 2014

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

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
General Electrical Knowledge	5
Acoustical Installation	10
Power Supplies	5
Intrusion Detection	17
Notification Appliances & Signaling Circuits	9
Supervisory Stations	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
- 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.
- <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	50
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

■ 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

Tests a candidate's knowledge of light and heavy carpentry, rough framing, trusses, sheathing, metal framing, paneling, trim, cabinetry, doors, windows, stairs, and incidental hardware

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3
Quest.
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- 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
- 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

COMMERCIAL PAVING

Tests a candidate's knowledge of the construction of roads, airport runways and aprons, parking lots, sidewalks, curbs and gutters, property line walls, patios and driveways, storm drainage facilities, and the performance of related excavating and grading.

Number of Questions	50
Time allowed (hours)	3

Subject Area	# Quest.
Plans & Specifications	3
Survey & Layout	3
Earthwork, Compaction & Stabilization	5
Asphalt Paving Procedures	7
Asphalt Properties and General Uses	7
Use & Application of Asphalt Emulsions	7
Asphalt Preservation & Maintenance	7
Concrete and Reinforcement	8
Safety	3

References

- Highway/Heavy Construction Level 1. 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.
- <u>Standard Specifications for Road and Bridge Construction</u>. 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.

CONCRETE FORMING AND PLACING (ENGLISH OR SPANISH)

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	6
Properties of Concrete	6
Preparation for Placement	5
Reinforcement	6
Formwork	5
Placement & Finishing	8
Specialized Installations & Finishes	3
Quality Control & Curing	6
Safety	5

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.

CONCRETE PLACING AND FINISHING

Concrete Placing and Finishing Contractor means a contractor whose services are generally limited to pouring, placing and finishing concrete flatwork (floors, slabs on grade, sidewalks, etc.) including placement of edge forms, mesh reinforcement and plastic vapor barriers incidental thereto.

Number of Questions	40
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	4
Properties of Concrete	6
Preparation for Placement	5
Reinforcement	3
Placement & Finishing	8
Specialized Installations & Finishes	4
Quality Control & Curing	6
Safety	4

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.

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

- 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.
- 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

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

DRYWALL

Tests a candidate's knowledge of installation of gypsum drywall products to wood and metal studs, wood and steel joists, and metal runners, including the preparation of the surface over which the drywall product is to be applied, and the placement of metal studs, runners, and all necessary trim.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Construction Materials & Methods	6
Thermal & Moisture Protection	5
Drywall Installation	7
Drywall Finishing	8
Steel Framing	7
Exterior Cladding	3
Interior Specialties & Finishes	4
Safety	4

References

- <u>Basic Safety.</u> 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

ELECTRICAL COMMUNICATION AND SOUND 2014

Tests a candidate's knowledge of the design, plan, installation, repair, alteration, and maintenance of telephone, data, intercom, and CATV systems.

Number of Questions	40
Time allowed (hours)	4

Subject Area Community antenna television & radio distribution systems	# Quest. 5
Communications Circuits	10
General Electrical Knowledge	5
Network-powered broadband communication	15
systems	
Radio & Television Equipment	5

- 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 SIGN CONTRACTOR 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).

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

Number of Questions

- <u>American Electrician's Handbook</u>, 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.

FENCING (ENGLISH OR SPANISH)

Tests a candidate's knowledge of fencing installation.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Layout & General Math	5
Wood Fencing	10
Masonry Fencing	10
Metal & Chain Link Fencing	10
Safety	10

References

- <u>Basic Safety.</u> 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

FINISH CARPENTRY

Tests a candidate's knowledge of finish carpentry construction materials and methods including trim installation.

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

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

References

40

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

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

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.
- <u>TDS 156 Standard Wood Header and Jamb Detail 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 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
- 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
- <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.
- <u>TDS 167 Sectional Garage Door & Electric Operator Checklist for Home Inspectors and Consumers.</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</u> <u>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
- 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.

 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 (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 Time allowed (hours)

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

Number of Questions

- <u>2012 Study Guide for Structural Steel</u>, 2012. ISBN: 978-1-269-08432 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
- 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.
- 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

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.

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

- <u>Basic Safety.</u> 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.

HARV CONTRACTOR

Install, maintain, repair, alter or extend air conditioning, refrigeration, heating, and ventilation systems, unlimited in horsepower or tons, including all duct systems, sheet metal, incinerators, boilers and unfired pressure vessel systems, solar heating and cooling systems and all appurtenances, apparatus or equipment used in connection therewith, also piping, ductwork, insulation of piping, vessels and ducts.

100

Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	22
Piping	10
Systems & Sizing	26
Equipment	15
Maintenance	22
Plan Reading	5

References

50

Number of Questions

- 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 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Florida Building Code 2017 Mechanical</u>, 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.
- 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.
- Residential Load Calculations Manual J. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org
- SMACNA-Residential Comfort System Installation Standards Manual, 7th. ISBN: 978-1617210648. Sheet Metal and Air Conditioning Contractors National Association, 4201 Lafayette Center Drive, Chantilly, VA 20151-1209. https://www.smacna.org/store/product/residential-comfort-systems-installation-standards-manual

HEATING CONTRACTOR

Heating Contractor is a specialty mechanical contractor, qualified and certified to install, maintain, repair, alter, add to or change systems of heating, whether by water, steam or hot air furnaces and all appurtenances and duct work used in conjunction therewith.

Number of Questions	100
Time allowed (hours)	3

Subject Area	# Quest.
General Knowledge	18
Piping	25
Systems & Sizing	25
Equipment	7
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 Fuel Gas, 2017. ISBN: 978-1-60983-691 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.

HVAC

Tests a candidate's knowledge of the installation, maintenance, repair, fabrication, alteration, and extension of AC/refrigeration, heating, ventilation systems, duct systems, warm air systems, low pressure boiler and unfired pressure vessel systems, solar heating and cooling

systems and related appurtenances unlimited in horsepower and tonnage.

100

50

4
Quest.
19
19
19
19
19
5

References

Number of Questions

- 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 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.

INTERLOCKING PAVERS

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.

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

Number of Questions

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.

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	# 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

References

Number of Questions

- 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 AIR CONDITIONING (ENGLISH OR SPANISH)

Qualified to install, maintain, repair, alter, fabricate or extend air conditioning, refrigeration systems, piping vessels, warm air heating, low pressure boilers, ventilation systems, duct systems, insulation, and related appurtenances within a complete system unlimited in horsepower or tonnage.

100

Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	22
Piping	10

Systems & Sizing	24
Equipment	11
Maintenance	28
Plan Reading	5

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 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.

JOURNEYMAN BURGLAR ALARM 2014

Journeyman shall mean any person who possesses the required skill, knowledge, and experience as evidenced by three (3) years' proven experience in the trade or craft, or education equivalent thereto, or a combination thereof, but not more than one-half (1/2) of such experience may be education equivalent, and who has passed an examination in his or her particular trade or craft and possesses a valid certificate of competency as a journeyman in such trade or craft. There shall be at least one (1) journeyman for every three (3) trainees on each construction or installation job site for which a permit is required, and which involves a trade in which journeyman are required and certified. It shall be the responsibility of the employing contractor, and the qualifying agent, to provide journeymen on each job site in accordance with this section, and failure to do so shall be a violation of this chapter, subject to the penalties provided herein, and provided under Section 1-5 of this Code. A journeyman may only work in the employ of a contractor holding a certificate of competency in the field in which the journeyman is certified. Journeymen shall be required in the electrical, plumbing, and mechanical trades. Journeymen are required to earn continuing education credit during each term the personal certificate of competency is valid as established in this chapter and as required by the board through written rules or regulations commencing October 1, 1995.

Number of Questions 50
Time allowed (hours) 2

Subject Area	# Quest.
General Electrical Knowledge	6
Intrusion Detection	6
Acoustical Installation	18
Notification Appliances & Signaling Circuits	13
Power Supplies	5
Supervisory Stations	2

- 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.

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.

Number of Questions	70
Time allowed (hours)	3

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

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.

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.

Time allowed (hours) Subject Area # Quest. Drain, Waste & Vent Systems 14 Fixtures & Fittings 6 General Knowledge 10
Drain, Waste & Vent Systems 14 Fixtures & Fittings 6
Fixtures & Fittings 6
3
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

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 Time allowed (hours)	50 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

- <u>American Electrician's Handbook</u>, 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 (ENGLISH OR SPANISH) 2014

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	# Quest.
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 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.
- Understanding and Servicing Alarm Systems, 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	# Quest. 10 10
Structures Piles Plan Reading & Estimating Safety	10 6 9
Sitework Structures Concrete and Reinforcement	10 10 10

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.
- <u>DESIGN OF COASTAL REVETMENTS, SEAWALLS, AND BULKHEADS</u>, 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-book-detail.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
- <u>The Dock Manual: Designing/Building/Maintaining</u>, 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/#

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.
Masonry Installation	12
Mortar	8
Masonry Units	8
Plan Reading & Estimating	8
Reinforcement	7
Safety	7

- 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 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 Time allowed (hours)	100 4
Subject Area	# Quest.
Piping	18
Equipment	14
Maintenance	22
Plan Reading	7
Systems & Sizing	20

References

General Knowledge

- 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 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.
- 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.
- Residential Load Calculations Manual J. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

MASTER ELECTRICIAN (ENGLISH OR SPANISH) 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.
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

19

- 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.

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.

Time allowed (hours)	4
Subject Area	# Quest.
General Knowledge	16
Piping	12
Systems & Sizing	31
Equipment	16
Maintenance	16
Plan Reading	9

100

References

Number of Questions

- 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 International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Florida Building Code 2017 Mechanical</u>, 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.
- Residential Load Calculations Manual J. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

MASTER PLUMBER (ENGLISH OR SPANISH)

The scope of work of a Master Plumber shall include the knowledge and skill to install, maintain, repair, alter or extend plumbing, septic tanks, drainage and supply wells, swimming pool and piping or solar heating systems and all appurtenances, apparatus or equipment used in connection therewith, including boilers and pressure and process piping and including the installation of water, gas, storm and sanitary sewer lines, and for the mechanical installation of gas, water and sewage plants and substations. The scope shall also include the installation, maintenance, repair, alteration or extension of air piping, vacuum line piping, oxygen line piping, nitrous oxide piping, fire line standpipes and fire sprinklers to the extent allowed by law, up to five (5) sprinkler heads out of potable water lines, ink and chemical lines, gasoline piping and tank and pump installation (excepting bulk storage plants) and pneumatic control piping systems. The scope of work does not include the installation

Number of Questions	100
Time allowed (hours)	3

Subject Area	# Quest.
Drain, Waste & Vent Systems	18
Fixtures & Fittings	8
General Knowledge	12
Isometrics & Plan Reading	13
Plumbing Math	10
Storm & Roof Drainage	8
Water Heaters	10
Water Supply and Distribution	14
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

MASTER TV ANTENNA 2014

A Master TV Antenna Specialty Electrical Contractor is qualified and certified to install, repair, alter, add to or change any privately owned TV antenna systems on and in multiple occupancy, residential or commercial buildings of three (3) or more tenants, rooms or apartments all connected to a central master system, as well as in theaters, schools and like public occupancies. Such systems may be electrically energized in whole or in part for the reception, amplification and distribution of TV signals. The scope of these systems shall include conductors and raceways, radio frequency carriers, laser beams and any other means of signal transmission as well as all apparatus pertaining to master TV antenna systems, including but not limited to amplifiers, splitters, cables and outlets for connecting individual TV sets. A master TV antenna specialty electrical contractor may connect to an existing separate circuit of approved capacity, which is terminated to an approved outlet, junction box.

Number of Questions	75
Time allowed (hours)	3

Subject Area	# Quest.
General Electrical Knowledge	16
Low Voltage, Signaling & Remote Control	8
Radio & Television Equipment	8
Community antenna television & radio	12
distribution systems	
Grounding & Bonding	20
Safety	11

- 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
- 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.
- NFPA 70 National Electrical Code, 2014. ISBN: 9781455906727. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

METAL AWNING & STORM SHUTTER CONTRACTOR (ENGLISH OR SPANISH)

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 Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	6
Concrete and Reinforcement	6
Metal Storm Panel Shutters	6
Wood Storm Shutters	5
Installation & Anchorage	16

References

Safety

Building and Municipal Codes

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

PAINTING AND DECORATING

Use paint spraying equipment and hand tools to apply paint to interior and exterior surfaces; includes painting concrete, sealing river rock, sandblasting and general coating except roof applications.

Time allowed (hours)	50 3
Subject Area	# Quest.
Safety	6
Substrates & Preparation	12
Materials	10
Application	12
Job Planning & Estimating	5
Equipment	5

References

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 Two, 1997. ISBN: 978-0-13-771296-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

PLASTERING & LATHING (ENGLISH OR SPANISH)

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
Time allowed (hours)	3

Subject Area	# Quest.
Plan Reading & Estimating	5
Framing	10
Lathing	10
Materials	10
Application & Finishing	10
Safety	5

References

7

4

- <u>ASTM C1007-11a Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories,</u> 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 C926-12a Standard Specification for Application of Portland Cement Based Plaster. 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.
- <u>Basic Safety</u>. 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, 2015. NCCER MATS Testing, 13614 Progress Blvd, Alachua, FL 32615.

PRESTRESSED, PRECAST CONCRETE ERECTION CONTRACTOR (ENGLISH OR SPANISH)

Prestressed Precast Concrete Erection Contractor is a contractor qualified and certified to erect structural precast concrete units such as decks, beams, girders, walls, columns and stairs that are or may be used as structural members for buildings and structures, including welding and rigging in connection therewith and to erect precast concrete units for guard rails and decorative panels above the ground floor, including such minor field fabrication as may be necessary.

Number of Questions	75
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	9
Preconstruction Plan	8
Practices & Procedures	18
Equipment	8
Tolerances	8
Quality Control	9
Building and Municipal Codes	6
Safety	9

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/.
- Carpentry Level Three, 2007. ISBN: 978-0-13-228600-8. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Erector's Manual: Standards and guidelines for the erection of precast</u>
 <u>concrete products.</u> Precast/Prestressed Concrete Institute, 9626
 Upper Lewisburg Salem Road, Brookville, OH 45309. Available at www.pci.org/

REFRIGERATION (UNLIMITED)

Tests knowledge of the installation, maintenance, repair, and alteration of refrigeration systems and related appurtenances intended to be used for the purpose of food and product preservation, unlimited in tonnage or horsepower.

Number of Questions Time allowed (hours)	80 3
Subject Area	# Quest.
General Knowledge	20
Piping	23
Systems & Sizing	24
Maintenance	5
Plan Reading	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
- Florida Building Code 2017 Fuel Gas, 2017. ISBN: 978-1-60983-691 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.

REINFORCING STEEL PLACING 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.

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

Quest.
6
5
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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
- 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

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

ROOF DECK

Roof Deck Contractor is a contractor qualified and certified to erect, construct, fabricate and install roof decks of Portland cement or gypsum concrete, using lightweight aggregate, on joists or other supporting members erected by others, and shall include the placing of forms and welding of supporting members for forms and miscellaneous reinforcing of the deck and the proportioning, mixing and placing of cement, aggregate and water, provided, however, that roof decks of wood, metal, heavy aggregate concrete, glass or plastic and the application of roofing felts or other water resistant membranes shall not be a part of the scope of such work. The experience requirement for the qualifying agent for a roof deck contractor shall be one (1) year.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	5
Formwork	10
Welding & Cutting	6
Steel Joists & Metal Decking	6
Lightweight Concrete	9
Safety	14

- ASTM C956-04 Standard Specification for Installation of Cast-In-Place Reinforced Gypsum Concrete. 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/Standards/C956.htm Candidate printed versions allowed if exam is open book.
- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.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 for Structural Lightweight-Aggregate Concrete ACI 213R-03.
 American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org/general/home.asp
- Introduction to Basic Rigging, 2015. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. available @ www.mypearsonstore.com
- <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>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.

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 Time allowed (hours)	50 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.

SCREEN ENCLOSURE

A Screen Enclosure Contractor is qualified and certified to fabricate, erect and install on grade only, screen enclosures with metal-supporting members, in whole or in part self-supporting, having walls and roof of screen except that the roof may be of metal or plastic where the area of solid wind resistant material does not exceed forty (40) percent of the area of screen roof. The scope of work shall include footings or slab on grade in connection therewith.

Number of Questions Time allowed (hours)	60 3
Subject Area	# Quest.
Foundations and Concrete	7
Plan Reading & Estimating	14
Safety	12
Understand and apply the building code as it pertains to the construction of screen enclosures and associated work.	6
Screen Enclosures	21

References

- 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)
- 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>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

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	50
Time allowed (hours)	2

Subject Area	# Quest
Plan Reading & Estimating	6
Building Materials, Fasteners & Adhesives	4
Windows & Exterior Doors	ϵ
Thermal & Moisture Protection	8
Exterior Finishing	15
Doors & Hardware	6
Safety	5

- 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>Study Guide for Siding & Finish Carpentry</u>, 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	49
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

- <u>Carpentry Level One, Carpentry Fundamentals 2013</u>, 2013. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Carpentry Level Three 2014</u>, 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
- <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.

STRUCTURAL STEEL

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	30
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5

50

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

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
- <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>Ironworking Level Three</u>, 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 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	75
Time allowed (hours)	3

Subject Area	# Quest.
Calculations	9
Circulation	10
Disinfection	10
Filtration	14
Management	7
Repairs	5
Safety	10
Testing	10

- 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: 978-1-60983-692-4. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Pool & Spa Operator Handbook</u>, 2012. ISBN: 0-9815803-9-5. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. www.nspf.org

TILE, TERRAZZO & MARBLE

Tile, Terrazzo, and Marble Contractors are those who are qualified to prepare the base, including backing material set, repair and refinish, tile, terrazzo and marble, and to install laminate or non-nailable wood flooring.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Substrates	10
Materials	6
Layout & Planning	6
Ceramic Tile Installation	8
Marble Installation	4
Terrazzo	5
Safety	5

References

- American National Standards Specifications for the Installation of Ceramic Tile, Version 2011.1. American National Standards Institute, 25 West 43rd Street, 4th floor, New York, NY 10036. Available at http://www.tcnatile.com/.
- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Setting Tile, 1995 copyright. ISBN: 978-1561580804. Taunton Press, 63 South Main 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 North America, 100 Clemson Research Blvd., Anderson, SC 29625. Available at www.tcnatile.com.
- <u>Terrazzo Specifications and Design Guide</u>, 1999. National Terrazzo and Mosaic Association, 110 East Market St., Leesburg, VA 20176. Available at http://naterrazzo.com/documents/Terrazzo_Specifications__amp__Design_Guide.pdf. Candidate printed versions allowed if exam is open book.
- <u>Tile Your World</u>, 2003. ISBN: 0-9742754-3-3. Mistflower Press, 6717 Mistflower Lane, Katy, TX 77449. Available at mistflowerpress.com/index.html.

UNDERGROUND UTILITIES

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

Number of Questions 50
Time allowed (hours) 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

- 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/
- 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

UNLIMITED INSULATION

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

- 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.
- <u>Insulating Level Two</u>, 1999. ISBN: 978-0-13-909417-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- <u>Study Guide for Insulation</u>. ISBN: 978-0-136-06315-5. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at http://nccer.pearsonconstructionbooks.com

UNLIMITED INSULATION (ENGLISH OR SPANISH)

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 Time allowed (hours)	50 3
Subject Area	# Quest.
Insulation Installation	13
Insulation Materials & Accessories	12
Plan Reading & Estimating	5
Safety	5
Systems Insulation	10
Theory	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.
- <u>Insulating Level Two</u>, 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

UNLIMITED PAINTING

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

- <u>Painting Industrial Level 4</u>, 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.