

CITY OF PORT ST. LUCIE - EXAM DESCRIPTIONS

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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.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Carports & Patio Covers	7
Miscellaneous Aluminum Structures	7
Plan Reading & Estimating	10
Safety	6
Screen Rooms	10
Screen Enclosures	10

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

- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.

Aluminum Construction & Limited Concrete

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, with limited concrete work incidental to these structures for footings and slabs.

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

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)
- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Study Guide for Residential Carpentry and Repair, 2nd edition**, 2014. ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

Awning Erection AE

Awning Erection Category-Class "AE": The scope of work of a Class "AE" specialty building contractor shall include and be limited to the fabrication, erection, and installation of awnings and canopies which become a permanent fixed part of building or structure or which are self-supporting, and the pouring of such footings and slabs on grade as may be necessary and incidental thereto. A Class "AE" specialty building contractor may install such hardware as may be necessary and incidental to the extension and retraction of awnings and canopies. This category applies to awnings that are movable or retractable or the replacement of detachable cloth/synthetic cover material on existing frames. Electrical wiring incidental to the awning may be included in the contract for work, but shall be subcontracted to a licensed electrical contractor. This category includes, but is not limited to, metal, canvas, and storm shutters. In order to be eligible to be certified as a Class "AE" specialty building contractor by the board, the applicant shall have at least three (3) years of practical experience in the category.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Building Codes	15
Design, Plan Reading and Estimating	8
Awnings, Canopies, & Hurricane Shutters	15
Concrete and Reinforcement	6
Safety	6

References

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Fabric Awning and Canopy Building Code**, 2010. Industrial Fabrics Association International, Roseville, MN. <https://www.ifai.com>
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Hurricane Shutter Designs**. APA - The Engineered Wood Association, 7011 S. 19th ST, Tacoma, WA 98466. Available at www.apawood.org. Candidate's printed versions allowed if exam is open book.
- **Study Guide for Residential Carpentry and 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

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	11
Sitework	6
Concrete	11
Masonry	10
Structural Steel	5
Carpentry & Metal Framing	5
Roofing	5
Associated Trades	3
Interior Finishes	5
Exterior Finishes	5
Safety	4

References

- **ACI 530 Building Code Requirements and Specification for Masonry Structures 2013**, 2013. ISBN: 978-1-929081-43-1. American Concrete

Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at <http://www.concrete.org> OR <http://www.techstreet.com/searches/16672726> OR amazon.com

- **Concrete Construction Level 2**, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136898327> <https://provexam.com/bookstore/>
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Study Guide for Commercial Carpentry, 2nd Edition**, 2014. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- **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.

Burglar & Fire Alarm Electrical 2020

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 Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **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 2020**, 2020. ISBN: 9781455922970. 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 <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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 2020

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.
Acoustical Installation	10
General Electrical Knowledge	5
Intrusion Detection	17
Notification Appliances & Signaling Circuits	9
Power Supplies	5
Supervisory Stations	4

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **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 2020**, 2020. ISBN: 9781455922970. 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.

Business and Law, 2nd edition

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.

*This exam uses the second edition of FLORIDA - NASCLA Contractors Guide to Business, Law and Project Management.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Business Organization	4
Licensing	3
Lien laws	3
Tax Laws	6
Safety OSHA	4
Labor Laws	6
Contract Management	5
Project Management	5
Estimating & Bidding	5
Financial Management	5
Risk Management	4

References

- **FLORIDA - NASCLA Contractors Guide to Business, Law and Project Management**, 2nd. NASCLA, 23309 N. 17th Drive, Building 1, Unit 110, Phoenix, AZ 85027.

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

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	6
Floor Systems	4
Wall & Ceiling Framing	8
Roof Framing	8
Thermal & Moisture Protection	4
Exterior Finishing	4
Cold-Formed Steel Framing	5
Windows, Doors & Stairs	4
Interior Trim	2
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 2023 - Building**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. <https://shop.iccsafe.org/>
- **Study Guide for Residential Carpentry and 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.
- **Standard Specifications for Road and Bridge Construction**. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. Available at www.dot.state.fl.us. Candidate printed versions allowed if exam is open book.

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 2020 - Building,** 2020. 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.

Concrete Forming and Placing

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

References

- **ACI 318 Building Code Requirements for Structural Concrete 2019,** 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- **Concrete Construction Level 1,** 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136868282> OR <https://provexam.com/bookstore/>.
- **Concrete Construction Level 2,** 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136898327> OR <https://provexam.com/bookstore/>.

Concrete/Masonry Contractor

Certified Specialty Contractors (g) A "structural masonry specialty contractor" is qualified and certified by the board to form, place, finish, install, repair, maintain, and replace any concrete or masonry products including: batching and mixing of aggregates, cement, and water to specifications, laying of block, brick, and other masonry units, the construction of forms and framework for the casting and shaping of concrete, the placing and erection of reinforcing steel and the pouring, placement, injecting and finishing of concrete. The scope of such work shall include all types of foundations, slabs, footers, curbs, walls, columns, beams and other structures, and other finishes.

Number of Questions	75
Time allowed (hours)	3.5

Subject Area	# Quest.
Plan Reading & Estimating	10
Properties of Concrete	10
Formwork	10
Reinforcement	10
Concrete Preparation, Placement & Quality Control	10
Masonry Construction Materials	10
Masonry Installation & Quality Control	10
Specialized Installations & Finishes	3
Safety	2

References

- **ACI 318 Building Code Requirements for Structural Concrete 2019,** 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- **Building Code Requirements and Specification for Masonry Structures,** 2022. ISBN: 978-1-929081-65-3. The Masonry Society, 105 South Sunset Street, Suite Q, Longmont, CO 80501-6172. This replaces ACI 530. Available at <https://shop.iccsafe.org>
- **Carpentry Level Three 2014,** 2014. ISBN: 0133823059. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Concrete Construction Level 1,** 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136868282> <https://provexam.com/bookstore/>
- **Concrete Construction Level 2,** 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136898327> <https://provexam.com/bookstore/>
- **Florida Building Code 2020 - Building,** 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Masonry Level One,** 2013. ISBN: 0133402487. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Masonry Level Two,** 2014. ISBN: 013377970X. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.

Demolition

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Interpretation	6
Structural Concrete	5
Structural Masonry	5
Structural Framing	4
Structural Steel	6
Blasting	6
Rigging and Cranes	8
Safety	10

References

- **Carpentry Fundamentals (Level 1)**, 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 2020 - Building**, 2020. 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.
- **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.

Direct Burial Cable Television (CATV) Contractor 2017

A Direct Burial Cable Television (CATV) Contractor is an engineering contractor certified by this Board to trench, backfill, and restore paving and concrete block and cement work either incidental to or as a part of the work of installing, repairing, altering or adding to any system of underground cable in the public rights-of-way for the commercial

transmission of television signals. Such contractor shall have a qualifying agent with experience and skill gained by at least two (2) years' practical work in this field and who has passed an examination approved by this Board. The scope of work of this classification shall be limited to that work directly involved in performing contract work underground for direct burial of cable for receiving and transmitting community antenna television signals. (Ord. No. 81-43, § 1, 4-21-81)

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Concrete Materials, Methods & Placement	12
Communication Systems	20
FL DOT Utility Accommodation	8
Earthwork	6
Safety	4

References

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **FL DOT Utility Accommodation Manual**, 2010. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. Available at www2.dot.state.fl.us/proceduraldocuments/procedures/bin/710020001/710020001.pdf. Candidate printed versions permitted in testing room if exam is open 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.
- **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.

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

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

- **Drywall Level 1**, 2007. ISBN: 978-0-13-604512-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Drywall Level 2**, 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 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.

Electrical Communication and Sound 2020

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	# Quest.
Communications Circuits	10
Community antenna television & radio distribution systems	6
General Electrical Knowledge	3
Network-powered broadband communication systems	16
Radio & Television Equipment	5

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Electrical Fire Alarm 2020

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	4
Installation Requirements Electrical	10
Initiating Devices	12
Notification Appliances & Signaling Circuits	13
Systems Testing	9
Supervisory Stations	2

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>

- **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 2020**, 2020. ISBN: 9781455922970. 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.

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).

Number of Questions	40
Time allowed (hours)	2
Subject Area	# Quest.
Basic Electricity & Wiring	6
Electrical Signs & Outline Lighting	16
Grounding & Bonding	4
Motors & Controls	3
Transformers	3
Wiring & Protection	4
Wiring Methods & Materials	4

References

- **American Electrician's Handbook**, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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 2020

The scope of certification includes the structural fabrication including concrete foundation, erection, installation, alteration, repair, service and wiring of electrical signs and outline lighting. The scope of certification shall not include the provision of, or any electrical work beyond, the last disconnect mean or terminal points. However, a contractor certified under this section may provide the electrical entrance requirements for metering and main disconnect of remote billboards or signs which are independent of any structure or building and which require no more than twenty-five (25) kilowatts at two hundred fifty (250) volts maximum (61G6-7.001).

Number of Questions	40
Time allowed (hours)	2
Subject Area	# Quest.
Basic Electricity & Wiring	6
Electrical Signs & Outline Lighting	16
Grounding & Bonding	4
Motors & Controls	3
Transformers	3
Wiring & Protection	4
Wiring Methods & Materials	4

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Elevator Electrical 2020

Elevator Specialty Electrical Contractor means the scope of certification includes and is limited to the electrical portion of the installation, repair, assembly, service and maintenance of elevators, conveyors, electrified dumbwaiters, escalators and moving sidewalks and all automatic and manual controls, signal systems and all other devices and manual controls, and electrical wiring appurtenant to the safe and efficient operation of such elevators. However, the scope of such certification shall not include work beyond the last disconnecting means or the terminal equipment adjacent to or in the elevator shaft or designated construction area. As regulated under Florida Statute, a person who has passed a competency examination as an Elevator Specialty Electrical Contractor may perform these or related tasks or may supervise persons in his employ in the execution of these tasks.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Commercial Elevators & Lifts	15
Construction Elevators	4
Dumbwaiters	3
Emergency Service & Signaling Devices	5
Escalators	5
General Electrical Knowledge	5
Moving Walks	3
Residential Elevators & Lifts	5
Safety	5

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **ASME A17.1-2013 Safety Code for Elevators and Escalators**, 2013. ISBN: 9780791868577. American Society of Mechanical Engineers,

Three Park Avenue, New York, NY 10016-5990. Available at <http://www.asme.org/shop/>.

- **ASME A17.3-11 Safety Code for Existing Elevators and Escalators**, 2011. ISBN: 978-0-7918-3359-9. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. Available at <http://www.asme.org/shop/>.
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Elevator Installation and Maintenance

Category Class "E" (2017)

Elevator Installation and Maintenance Category Class "E": The scope of work of a Class "E" specialty building contractor shall include and be limited to the construction, installation, maintenance, repair, alteration, and extension of elevators, dumbwaiters, escalators, or any vertical conveyance. In order to be eligible to be certified as a Class "E" specialty building contractor by the board, the applicant shall have at least four (4) years of practical experience in the category

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Commercial Elevators & Lifts	15
Construction Elevators	4
Dumbwaiters	3
Emergency Service & Signaling Devices	5
Escalators	5
General Electrical Knowledge	5
Moving Walks	3
Residential Elevators & Lifts	5
Safety	5

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **ASME A17.1-2019 Safety Code for Elevators and Escalators**, 2019. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.
- **ASME A17.3 2020 Safety Code for Existing Elevators and Escalators**, 2020. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.
- **ASME A17.5-11 Elevator and escalator electrical equipment**, 2011. ISBN: 978-1-55436-757-3. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. Available at <http://www.asme.org/shop/>.
- **Code of Federal Regulations, Title 29, Labor, Pt. 1926, Revised as of July 1, 2019**, 2019. National Archives and Records Administration, College Park, MD. <https://www.govinfo.gov/content/pkg/CFR-2020-title29-vol8/pdf/CFR-2020-title29-vol8.pdf>
- **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 Electric Code 2017**, 2017. ISBN: 978-145591277-3. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Elevator Installation and Maintenance

Category Class "E" (2020)

Elevator Installation and Maintenance Category Class "E": The scope of work of a Class "E" specialty building contractor shall include and be limited to the construction, installation, maintenance, repair, alteration, and extension of elevators, dumbwaiters, escalators, or any vertical conveyance. In order to be eligible to be certified as a Class "E" specialty building contractor by the board, the applicant shall have at least four (4) years of practical experience in the category

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Commercial Elevators & Lifts	15
Construction Elevators	4
Dumbwaiters	3
Emergency Service & Signaling Devices	5
Escalators	5
General Electrical Knowledge	5
Moving Walks	3
Residential Elevators & Lifts	5
Safety	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 <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **ASME A17.1-2019 Safety Code for Elevators and Escalators**, 2019. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.
- **ASME A17.3 2020 Safety Code for Existing Elevators and Escalators**, 2020. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.
- **ASME A17.5-11 Elevator and escalator electrical equipment**, 2011. ISBN: 978-1-55436-757-3. American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990. Available at <http://www.asme.org/shop/>.
- **Code of Federal Regulations, Title 29 Labor Pt 1926 Revised as of July 1, 2016**, 2016. ISBN: 978-1354237915. National Archives and Records Administration, College Park, MD. <https://bookstore.gpo.gov>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Excavation Contractor

Tests a candidate's knowledge of the excavation or removal of materials such as rock, gravel and sand to construct or excavate canals, lakes, levees, including the clearing of land of surface debris; and vegetation, the grubbing of roots, the removal of debris; and leveling of related surfaces.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	10
General Knowledge	6
Survey & Layout	5
Clearing & Grubbing	4
Excavating	7
Dewatering	3
Grading	8
Safety	7

References

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Study Guide for Excavation Contractors, 2nd edition**, 2014. ISBN: 978-1-269-78572-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

Fencing

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

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Fences and Retaining Walls**, 1990. ISBN: 0-934041-53-9. Craftsman Book Company, 6058 Corte Del Cedro, Carlsbad, CA 92009. Available at www.craftsman-book.com.
- **Florida Building Code 2020 - Building**, 2020. 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.
Plan Reading & Estimating	6
Building Materials, Fasteners & Adhesives	6
Windows & Exterior Doors	5
Exterior Finishing	6
Doors & Hardware	8
Interior Trim	9
Cabinet Installation	5
Safety	5

References

- **Florida Building Code 2020 - Building**, 2020. 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.

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 2020 - Building**, 2020. 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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book.
- **TDS 158 - Glazing in Garage Doors**. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book.
- **TDS 163 - Garage Door R-Value**. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book.
- **TDS 165 - Garage Door Manual Operation**. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book.
- **TDS 172 - Garage Door Labels**. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book

- **TDS 182 - Technical Considerations for Dock Doors.** Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.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 <https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp>. Candidate printed versions allowed if exam is open book.

General Contractor

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

Number of Questions	80
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	11
Sitework	5
Concrete	12
Masonry	8
Structural Steel	10
Carpentry & Metal Framing	12
Roofing	4
Associated Trades	2
Interior Finishes	5
Exterior Finishes	5
Safety	6

References

- **ACI 530 Building Code Requirements and Specification for Masonry Structures 2013,** 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at <http://www.concrete.org> OR <http://www.techstreet.com/searches/16672726> OR amazon.com
- **Carpentry Level One, 2013 edition,** 2013. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Concrete Construction Level 2,** 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. <http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0136898327> <https://provexam.com/bookstore/>
- **Florida Building Code 2020 - Building,** 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.

- **Study Guide for Commercial Carpentry, 2nd Edition,** 2014. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- **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.

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.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Glass & Glazing	12
Plastic & Glazing	4
Sealants	10
Curtain Walls	6
Structural Glazing Systems	4
Bath Enclosures & Mirrors	4
Safety	5

References

- **Basic Safety.** ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Florida Building Code 2020 - Building,** 2020. 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.

Irrigation Sprinkler

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	4
Planning & Layout	8
Materials	8
Controls	6
Irrigation Installation	10
Cross Contamination & Backflow Prevention	5
Reclaimed Water	3
Safety	6

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 2020 - Plumbing,** 2020. 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 Burglar Alarm 2017

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

References

- **American Electrician's Handbook,** 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>

- **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 Burglar Alarm 2020

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

References

- **American Electrician's Handbook,** 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **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 2020,** 2020. ISBN: 9781455922970. 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

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
Special Conditions	3
Communication Systems	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 <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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 Electrician 2020

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

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	5
Equipment for General Use	6
General Electrical Theory & Principles	12
Motors & Controls	4
Special Conditions	3
Special Equipment	3
Special Occupancies	4
Wiring & Protection	14
Wiring Methods & Materials	24

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>

- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Journeyman Residential Electrical 2020

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

Number of Questions	65
Time allowed (hours)	3
Subject Area	# Quest.
General Electrical Knowledge	15
Wiring & Protection	15
Wiring Methods & Materials	10
Equipment for General Use	7
Special Occupancies	3
Special Equipment	2
Special Conditions	3
Communication Systems	5
Motors & Controls	5

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Journeyman Sign Electrician 2020

Tests a candidate's knowledge of the planning, installation, repair, alteration, and maintenance of electric conductors, raceways, and equipment associated with electric signs. The branch circuit supplying power to the sign shall originate from an existing disconnect or power outlet.

Number of Questions	40
Time allowed (hours)	2
Subject Area	# Quest.
Electrical Signs & Outline Lighting	13
Grounding & Bonding	5
General Electrical Knowledge	6
Motors & Controls	3
Transformers	3
Wiring & Protection	6
Wiring Methods & Materials	4

References

- **American Electrician's Handbook**, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at

<https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>

- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Lightning Protection 2017

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	50
Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	10
Hazardous Structures	5
Heavy Duty Stacks	5
Ordinary Structures	10
Safety	5
Special Occupancies	5
Wind Turbines and Watercraft	5
Explosive Materials	5

References

- **American Electrician's Handbook**, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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.

Limited Insulation

Tests a candidate's knowledge of insulation installation, maintenance, repair, alteration, and extension to prevent loss or gain of heat from rooms or buildings. This includes installation, repair, maintenance, and extension of acoustical insulation.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Insulation Installation	15
Insulation Materials & Accessories	15
Plan Reading & Estimating	5
Safety	7

Theory 8

References

- **Basic Safety**, 2015. ISBN: 0-13-412901-6. NCCER MATS Testing, 13614 Progress Blvd, Alachua, FL 32615. Available at <http://nccer.pearsonconstructionbooks.com>
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Insulating Level One**, 2018. ISBN: 0-13-413099-5. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at <https://www.pearson.com/en-us.html>
- **Introduction to Construction Drawings**, 2015. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at mypearsonstore.com
- **Thermal and Moisture Protection**, 2013. ISBN: 0-13-377903-3. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.

Limited Painting

Tests a candidate's knowledge of painting and decorating, including spray application and pressure washing. Does not include sandblasting or application of plural component roof materials, waterproofing, or damp-proofing.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating & Planning	6
Substrates & Preparation	24
Materials	19
Application	20
Safety	6

References

- **Paint Contractor's Manual**, 2022. Craftsman Book Company, 6058 Corte Del Cedro, Carlsbad, CA 92009.
- **PCA Craftsman Manual & Textbook - 8th Edition**, 8th. The Painting Contractors Association (PCA), 2316 Millpark Drive, Maryland Heights, MO 63043.

Low Voltage 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 <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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.

Low Voltage 2017

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 and Protection	5
Wiring Methods & Materials	10
Equipment for General Use	3
Special Occupancies	4
Special Equipment	4
Special Conditions	4
Communication Systems	8

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electric Code 2017**, 2017. ISBN: 978-145591277-3. 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.

Low Voltage 2020

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 and Protection	5
Wiring Methods & Materials	10
Equipment for General Use	3
Special Occupancies	4
Special Equipment	4
Special Conditions	4
Communication Systems	8

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. 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.

Maintenance Electrician 2017

Tests a candidate's knowledge of the maintenance of existing electrical systems operating at 480 volts or less. Exam is limited to the repair, alteration, and relocation of existing electrical branch circuits and equipment.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
General Electrical Knowledge	15
Safety	5
Servicing Applications	8
Wiring & Protection	13
Wiring Methods & Materials	9

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electric Code 2017**, 2017. ISBN: 978-145591277-3. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Maintenance Electrician 2020

Tests a candidate's knowledge of the maintenance of existing electrical systems operating at 480 volts or less. Exam is limited to the repair, alteration, and relocation of existing electrical branch circuits and equipment.

Number of Questions	51
Time allowed (hours)	2

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

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electric Code, 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

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	# Quest.
Carpentry	10

Florida Building Code application to Marine Structures	10
Piles	10
Plan Reading & Estimating	6
Safety	9
Sitework	10
Structures	10
Concrete and Reinforcement	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.
- **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/Vol2_SDM.pdf Candidate printed versions allowed if exam is open book.
- **Florida Building Code 2020 - Building**, 2020. 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.Contractors-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/#>

Masonry

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

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	8
Masonry Units	8

Mortar	8
Reinforcement	7
Masonry Installation	12
Safety	7

References

- **ACI 530 Building Code Requirements and Specification for Masonry Structures 2013**, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at <http://www.concrete.org> OR <http://www.techstreet.com/searches/16672726> OR amazon.com
- **Florida Building Code 2020 - Building**, 2020. 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 (Limited)

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	100
Time allowed (hours)	4

Subject Area	# Quest.
General Knowledge	18
Piping	19
Systems & Sizing	20
Equipment	15
Maintenance	23
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 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Fuel Gas**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Mechanical**, 2020. 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. www.amazon.com
- **Residential Load Calculation - Manual J**, 8th Edition. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org.

Master AC (Unlimited)

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 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Fuel Gas**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Mechanical**, 2020. 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. www.amazon.com
- **Residential Load Calculation - Manual J**, 8th Edition. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org.

Master Electrician 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

- **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.

Master Electrician 2014

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

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	3
Equipment for General Use	6
General Electrical Knowledge	12
Motors & Controls	4
Plan Reading	4
Special Conditions	4
Special Equipment	3
Special Occupancies	2
Wiring & Protection	17
Wiring Methods & Materials	20

References

- **American Electrician's Handbook**, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545,

Blacklick, OH 43004. Available at <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>

- **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 Electrician 2020

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

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	3
Equipment for General Use	6
General Electrical Knowledge	12
Motors & Controls	5
Plan Reading	2
Special Conditions	4
Special Equipment	4
Special Occupancies	2
Wiring & Protection	17
Wiring Methods & Materials	20

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. 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 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Fuel Gas**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Mechanical**, 2020. 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. www.amazon.com
- **Residential Load Calculation - Manual J**, 8th Edition. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org.

Master Plumber

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.

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 2020 - Plumbing**, 2020. 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 Residential Electrical 2020

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

Number of Questions	65
Time allowed (hours)	3

Subject Area	# Quest.
Communication Systems	5
Equipment for General Use	8
General Electrical Knowledge	18
Residential Motors	5
Special Equipment	4
Wiring & Protection	13
Wiring Methods & Materials	12

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

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 2020 - Mechanical**, 2020. 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>.
- **Sheet Metal Level Three**, 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>.

Master Sign Electrician 2020

Tests a candidate's knowledge of the design, plan, installation, repair, alteration, and maintenance of electric conductors, raceways, and equipment associated with electric signs. The branch circuit supplying power to the sign shall originate from an existing disconnect or power outlet.

Number of Questions	40
Time allowed (hours)	2
Subject Area	# Quest.
Electrical Signs & Outline Lighting	16
General Electrical Knowledge	6
Grounding & Bonding	4
Motors & Controls	3
Transformers	3
Wiring & Protection	4
Wiring Methods & Materials	4

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus,

OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>

- **NFPA 70 - National Electrical Code 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Master TV Antenna (2020 edition)

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	15
Low Voltage, Signaling & Remote Control	12
Radio & Television Equipment	9
Community antenna television & radio distribution systems	12
Grounding & Bonding	19
Safety	8

References

- **American Electrician's Handbook**, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at <https://www.mhprofessional.com/american-electricians-handbook-seventeenth-edition-9781260457919-usa>
- **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 2020**, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

Master TV Antenna 2017

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 distribution systems	12
Grounding & Bonding	20
Safety	11

References

- **American Electrician's Handbook**, 16th Edition. ISBN: 978-0071798808. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at <https://www.mheducation.com/highered/product/american-electricians-handbook-sixteenth-edition-croft-hartwell/9780071798808.html>
- **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

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	7
Concrete and Reinforcement	6
Metal Storm Panel Shutters	6
Wood Storm Shutters	4
Installation & Anchorage	16

Building and Municipal Codes	7
Safety	4

References

- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Carpentry Fundamentals (Level 1)**, 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 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Hurricane Shutter Designs**. APA - The Engineered Wood Association, 7011 S. 19th ST, Tacoma, WA 98466. Available at www.apawood.org. Candidate's printed versions, Form T450 is allowed if exam is open book.

Plastering & Lathing

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

- **ASTM C1007-11a Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories**, 2011. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **ASTM C1063-12a - Standard Specification for Installation of Lathing & Furring to Receive Interior & Exterior Portland Cement Based Plaster**, 2012. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>.

<http://www.astm.org/>. Candidate printed versions allowed if exam is open book.

- **ASTM C926-15b Standard Specification for Application of Portland Cement-Based Plaster**, 2015. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>.
- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Florida Building Code 2020 - Building**, 2020. 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.

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 2020 - Residential**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Masonry and Sitework for the Residential Contractor, 2nd edition**, 2nd. ISBN: 978-1-269-78556-3. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- **Study Guide for Residential Carpentry and Repair, 2nd edition**, 2014. ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

OR if the book above is unavailable, it may be substituted by the

following.

- **Residential Home Builder Study Guide**. ISBN: 9781323550915. 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 2020 - Residential**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.

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

References

- **Florida Building Code 2020 - Building**, 2020. 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.

OR if the book above is unavailable, it may be substituted by the following.

- **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	50
Time allowed (hours)	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

- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Study Guide for Siding & Finish Carpentry**, 2nd Edition. ISBN: 9781323963364. 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	4
Concrete and Reinforcement	9
Wood	6
Structural Steel	8
Welding	7
Non-Electric Sign	8
Safety	7

References

- **Carpentry Level One, 2022 edition**, 2022. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- **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 2020 - Building**, 2020. 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 Heating	5
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 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Mechanical**, 2020. 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/SWPHM Manual](https://secure.fsec.ucf.edu/fsecstore/do/product/Publications/SWPHM%20Manual).

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	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Structural Steel	10
Welding & Cutting	6
Structural Steel-Bolting	4
Metal Decking	6
Metal Buildings	3
Metal Joists & Trusses	5
Rigging and Cranes	6
Safety	5

References

- **Florida Building Code 2020 - Building**, 2020. 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>.
- **Ironworking Level Three**, 2012. ISBN: 978-0-13-257785-4. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Ironworking Level Two**, 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

References

- **Florida Administrative Code, Ch. 64E-9, Public Swimming Pools & Bathing Places**, 2009. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. available at <http://www.floridahealth.gov/environmental-health/swimming->

[pools/_documents/64E-9_FAC_Draft_Rev7_no_strike.pdf](#) Candidate printed versions allowed if exam is open book

- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.
- **Florida Building Code 2020 - Residential**, 2020. 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.

Tile & Marble

Mix and prepare the base for and set tile and marble.

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	6
Substrates	11
Materials	6
Layout & Planning	6
Ceramic Tile Installation	11
Marble & Stone Installation	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. The Taunton Press, 63 South Main St., P.O. Box 5506, Newton, CT 06470. 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.
- **Tile Your World**, 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

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

References

- **Basic Safety**, 2015. ISBN: 0-13-412901-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>
- **Thermal and Moisture Protection**, 2013. ISBN: 0-13-377903-3. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Insulating Level One**, 2018. ISBN: 0-13-413099-5. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at <https://www.pearson.com/en-us.html>
- **Insulating Level Two**, 2018. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at <https://www.pearson.com/en-us.html>
- **Insulating Level Three**, 2018. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at <https://www.pearson.com/en-us.html>
- **Florida Building Code 2020 - Energy Conservation**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org.