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ALUMINUM STRUCTURES & SPECIALTIES

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

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

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.aeof.org/>. (Also permitted is the Guide to Aluminum Construction in High-Wind Area ASCE7 Supplement to the 2010 Guide)
- **ASTM D4756-06 Standard Practice for Installation of Rigid PVC Siding & Soffit**, 2006. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Florida Building Code 2020 - Building**, 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

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 employment 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://nconstructionbooks.com/store/product.aspx?isbn=0136868282> OR <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

BUILDING CONTRACTOR (SPANISH)**BURGLAR & FIRE ALARM ELECTRICAL (2023 EDITION)**

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

Number of Questions	70
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading & Estimating	10
Sitework	5
Concrete	11
Masonry	8
Structural Steel	4
Carpentry & Metal Framing	10
Roofing	4
Associated Trades	3
Interior Finishes	4
Exterior Finishes	4
Safety	7

References

- **ACI 530 Building Code Requirements and Specification for Masonry Structures 2013**, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at <http://www.concrete.org> OR <http://www.techstreet.com/searches/16672726> OR amazon.com
- **Concrete Finishing Level Two**, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Masonry Level Three**, 2014. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.
- **Study Guide for Commercial Carpentry, 2nd Edition**, 2014. 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

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	4
Notification Appliances & Signaling Circuits	5
Grounding & Bonding	4
Raceways & Boxes	2
Conductors & Cables	3
Special Occupancies	3

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 or 2023)**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.
- **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 & 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 & 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 & FIRE ALARM ELECTRICAL 2023 (SPANISH)

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.
Conductors & Cables	3
Fire & Intrusion Detection & Alarms	24
Grounding & Bonding	4
General Electrical Knowledge	5
Notification Appliances & Signaling Circuits	5
Power Supplies	5
Raceways & Boxes	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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.
- **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.

BURGLAR ALARM ELECTRICAL 2020 (SPANISH)

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 (SPANISH)

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Business Organization	2
Licensing	2
Lien laws	3
Tax Laws	4
Safety OSHA	4
Labor Laws	7
Contract Management	9
Project Management	6
Estimating & Bidding	4
Financial Management	6
Risk Management	3

References

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

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.

BUSINESS AND LAW, 2ND EDITION (SPANISH)

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

*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 2023 (SPANISH)

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)	2
Subject Area	# Quest.
Cold-Formed Steel Framing	5
Exterior Finishing	4
Floor Systems	4
Interior Trim	2
Plan Reading & Estimating	6
Safety	5
Roof Framing	8
Thermal & Moisture Protection	4
Wall & Ceiling Framing	8
Windows, Doors & Stairs	4

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

CLASS A AIR CONDITIONING

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, Version 2.5. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206.

CLASS A AIR CONDITIONING (SPANISH)

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

Number of Questions	100
Time allowed (hours)	4
Subject Area	# Quest.
Piping	18
Equipment	14
Maintenance	22
Plan Reading	7
Systems & Sizing	20
General Knowledge	19

References

- **Advanced Mechanical Study Guide , 2nd edition**, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- **Florida Building Code 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 Calculations - Manual J**. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

CLASS B AIR CONDITIONING

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, Version 2.5. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206.

CLASS B AIR CONDITIONING (SPANISH)

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

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

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 Level One, 2013 edition**, 2013. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. 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**, 2013. ISBN: 0133402487. 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.

DEMOLITION (SPANISH)

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

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

References

- **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>.
- **ISSE 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 Road M.S. 3500, Tallahassee, FL 32399. Available at www2.dot.state.fl.us/proceduraldocuments/procedures/bin/710020001/710020000. 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: 978-1-269-70777-7. 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

DRYWALL (SPANISH)

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.
Construction Materials & Methods	6
Drywall Finishing	8

Drywall Installation	7
Exterior Cladding	3
Interior Specialties & Finishes	4
Plan Reading & Estimating	6
Safety	4
Steel Framing	7
Thermal & Moisture Protection	5

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 CONTRACTOR (2023 EDITION)**ELECTRICAL CONTRACTOR SPANISH (2023 EDITION)**

(UPDATED TO 2023 CODE) 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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

A Master Electrician is a contractor whose principal contracting business consists of the execution of contracts requiring the experience, financial means, 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 including the electrical installations and systems within plants and substations, all in such manner as to comply with all plans, specifications, codes, laws and regulations applicable and his scope of work shall include that of a room air-conditioning contractor, installation only. The scope of such contractor's work shall apply to private and public property and shall include any excavation and paving work incidental thereto, and shall include the work of all specialty electrical contractors. Such contractors shall subcontract with a qualified contract.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
General Electrical Knowledge	12
Communication Systems	4
Equipment for General Use	6
Motors & Controls	5
Plan Reading	1
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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

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 (2023 EDITION)

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	7
Electrical Signs & Outline Lighting	14

Grounding & Bonding	5
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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

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.

ELECTRICAL SIGN CONTRACTOR SPANISH (2023 EDITION)

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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

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.
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**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-vol18/pdf/CFR-2020-title29-vol18.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

FENCING (SPANISH)

Tests a candidate's knowledge of fencing installation.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Layout & General Math	6
Wood Fencing	10
Masonry Fencing	10
Metal & Chain Link Fencing	9
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

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 [\[pages/DASMA-technical-data-sheets.asp\]\(https://dasma.com/dasma-pages/DASMA-technical-data-sheets.asp\). Candidate printed versions allowed if exam is open book](https://dasma.com/dasma-</div><div data-bbox=)

- **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=0136868282> OR <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

GENERAL CONTRACTOR (SPANISH)

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

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

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 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>.
- **Concrete Finishing Level Two**, 1999. ISBN: 978-0-13-014860-5. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Florida Building Code 2020 - Building**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Masonry Level Three**, 2005. ISBN: 978-0-13-109169-6. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.
- **Study Guide for Commercial Carpentry, 2nd Edition**, 2014. 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

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.

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.

IRRIGATION SPRINKLER (SPANISH)

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

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

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 AIR CONDITIONING

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

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	20
Piping	10
Systems & Sizing	24
Equipment	10
Maintenance	24
Plan Reading	12

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 - 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.

JOURNEYMAN AIR CONDITIONING (SPANISH)

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

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	22
Piping	10
Systems & Sizing	24
Equipment	11
Maintenance	28
Plan Reading	5

References

- **Advanced Mechanical Study Guide , 2nd edition**, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- **Florida Building Code 2020 - Building**, 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.

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 (2023 EDITION)

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

Number of Questions	70
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	4
Equipment for General Use	6
General Electrical Theory & Principles	10
Motors & Controls	3
Plan Reading	2
Special Conditions	3
Special Equipment	3
Special Occupancies	2
Wiring & Protection	15
Wiring Methods & Materials	22

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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

JOURNEYMAN ELECTRICIAN (SPANISH) (2023 EDITION)

(UPDATED TO 2023 CODE) A Journeyman Electrician is qualified and tested to perform work in the electrical trades while employed by a Master Electrician.

Number of Questions	70
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	4
Equipment for General Use	6
General Electrical Theory & Principles	10
Motors & Controls	3
Plan Reading	2

Special Conditions	3
Special Equipment	3
Special Occupancies	2
Wiring & Protection	15
Wiring Methods & Materials	22

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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

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	70
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	4
Equipment for General Use	6
General Electrical Theory & Principles	10
Motors & Controls	3
Special Conditions	2
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 ELECTRICIAN 2020 (SPANISH)

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

Number of Questions	70
Time allowed (hours)	3
Subject Area	# Quest.
Communication Systems	4
Equipment for General Use	6
General Electrical Theory & Principles	10
Motors & Controls	2
Plan Reading	3
Special Conditions	3
Special Equipment	3
Special Occupancies	2
Wiring & Protection	14
Wiring Methods & Materials	23

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 PLUMBER

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

Number of Questions	80
Time allowed (hours)	3
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fixtures & Fittings	6
General Knowledge	10
Isometrics & Plan Reading	10
Plumbing Math	5

Storm & Roof Drainage	8
Water Heaters	8
Water Supply and Distribution	12
Safety	7

References

- **Florida Building Code 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

JOURNEYMAN PLUMBER (SPANISH)

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

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

References

- **Florida Building Code 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

JOURNEYMAN PLUMBER WITH GAS (SPANISH)

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

Number of Questions	100
Time allowed (hours)	2
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fixtures & Fittings	7
General Knowledge	10
Isometrics & Plan Reading	10
Plumbing Math	11
Storm & Roof Drainage	8
Water Heaters	7
Water Supply and Distribution	12
Fuel Gas Systems	14
Safety	7

References

- **Florida Building Code 2023 - Fuel Gas**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Florida Building Code 2023 - Plumbing**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Plumbing Basics for Contractors, 4th Edition**, 2021. ISBN: 9780137783229. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

JOURNEYMAN PLUMBING WITH GAS

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

Number of Questions	100
Time allowed (hours)	2
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fixtures & Fittings	7
General Knowledge	10

Isometrics & Plan Reading	10
Plumbing Math	11
Storm & Roof Drainage	8
Water Heaters	7
Water Supply and Distribution	12
Fuel Gas Systems	14
Safety	7

References

- **Florida Building Code 2023 - Fuel Gas**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Florida Building Code 2023 - Plumbing**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Plumbing Basics for Contractors, 4th Edition**, 2021. ISBN: 9780137783229. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

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 SHEET METAL

Tests a candidate's knowledge of sheet metal fabrication, intended for the installation, replacement, repair, alteration, and extension of ferrous and Non-ferrous ducting in ventilation and exhaust systems.

Number of Questions	60
Time allowed (hours)	3
Subject Area	# Quest.
Plan Reading, Estimating & Math	8
Code & General Knowledge	8
Layout & Fabrication	10
Installation	10
Air Properties & Distribution	8
Air Distribution Accessories	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 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>.

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 ENERGY (2023 EDITION)

(UPDATED TO 2023 CODE) 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	11
Equipment for General Use	3
Special Occupancies	3
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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.
- **Understanding and Servicing Alarm Systems**, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.

LIMITED ENERGY CONTRACTOR

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Installation	8
Communication and Sound	5
General Electrical Knowledge	5
Intrusion Detection	15
Notification Appliances & Signaling Circuits	8
Power Supplies	5
Supervisory Stations	4

References

- **Low Voltage Wiring: Security/Fire-Alarm Systems**, 2001. ISBN: 978-0071376747. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com.
- **NFPA 70 - National Electrical Code**, 2011. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- **Understanding and Servicing Alarm Systems**, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.
- **Wiring Diagrams Pal -The Reference Guide for Electrical Wiring Installations**. ISBN: 0-9652171-4-0. Pal Publications, 374 Circle of Progress, Pottstown, PW 19464-3810.

LIMITED ENERGY SPANISH (2023 EDITION)

(UPDATED TO 2023 CODE) 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	11
Equipment for General Use	3
Special Occupancies	3
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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.
- **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 (2023 EDITION)

(UPDATED TO 2023 CODE) 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
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Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	15
Safety	3
Servicing Applications	12
Wiring & Protection	11
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 Electrical Code 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

MAINTENANCE ELECTRICIAN (SPANISH) 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	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 Electrical Code 2020**, 2020. ISBN: 9781455922970. 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.

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/#>

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, Version 2.5. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206.

MASTER AC (LIMITED) (SPANISH)

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

Number of Questions	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 Calculations - Manual J**. 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, Version 2.5. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206.

MASTER AC (UNLIMITED) (SPANISH)

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

Number of Questions	100
Time allowed (hours)	4
Subject Area	# Quest.
Piping	18
Equipment	14
Maintenance	22
Plan Reading	7
Systems & Sizing	20
General Knowledge	19

References

- **Advanced Mechanical Study Guide , 2nd edition**, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- **Florida Building Code 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 Calculations - Manual J**. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206. www.acca.org

MASTER ELECTRICIAN (2023 EDITION)

(UPDATED TO 2023 CODE) 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 2023**, 2023. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

MASTER ELECTRICIAN (SPANISH) 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	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**, 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 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, Version 2.5. ISBN: 9781892765253. Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206.

MASTER PLUMBER WITH GAS

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

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
Drain, Waste & Vent Systems	15
Fuel Gas Systems	15
Fixtures & Fittings	8
General Knowledge	10
Isometrics & Plan Reading	8
Plumbing Math	6
Safety	6
Storm & Roof Drainage	8
Water Heaters	12
Water Supply and Distribution	12

References

- **Florida Building Code 2020 - Fuel Gas**, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **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 PLUMBER WITH GAS (SPANISH)

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

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
Drain, Waste & Vent Systems	15
Fuel Gas Systems	15
Fixtures & Fittings	8
General Knowledge	10
Isometrics & Plan Reading	8
Plumbing Math	6
Safety	6
Storm & Roof Drainage	8
Water Heaters	12
Water Supply and Distribution	12

References

- **Florida Building Code 2023 - Fuel Gas**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Florida Building Code 2023 - Plumbing**, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- **Plumbing Basics for Contractors, 4th Edition**, 2021. ISBN: 9780137783229. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

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
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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

MASTER SIGN ELECTRICIAN 2020 (SPANISH)

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>.

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

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.

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.

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.

METAL AWNING & STORM SHUTTER CONTRACTOR (SPANISH)

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

Number of Questions	49
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	8
Concrete and Reinforcement	7
Metal Storm Panel Shutters	6
Wood Storm Shutters	5
Installation & Anchorage	13
Building and Municipal Codes	7
Safety	3

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.

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.** Substitute references shown below..
- **Residential Home Builder Study Guide.** ISBN: 9781323550915. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

ROOFING (SPANISH)

A Roofing Contractor is a contractor qualified and certified to install, repair and replace roof systems, as defined in the South Florida Building Code, and the waterproofing thereof. Work may include, but shall not be limited to, roof deck insulation, roof coating, painting and covering, including use of sheet metal and installation of other sheet metal products incidental to roofing work, including gutters and downspouts, and other material in connection therewith or any combination thereof and including installation of nonstructural decking and siding. During the repair or replacement process of a roof system, a roofing contractor shall be allowed to repair and/or replace damaged decking and/or damaged wood structural or nonstructural members of the roof framing, provided that such replacement and/or repair conforms to the requirements of the South Florida Building Code and the repair or replacement of damaged decking and wood structural or nonstructural members of the roof framing constitutes less than fifty (50) percent of the value of the total work performed.

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

References

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

ROOFING UNLIMITED

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

Number of Questions	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.** Substitute references shown below..
- **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.

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/SWPHManual>

STUCCO CONTRACTOR

Stucco Contractor means any person or firm qualified and certified by the Board to perform any work to coat surfaces with a mixture of sand or other aggregate gypsum plaster, portland cement or quicklime and water, or any combination of such material as to create a permanent surface coating. Such Contractors may apply and affix gypsum or metal lath or any other product prepared or manufactured, including the placing of metal studs and runners to which lath is to be applied, to provide key or suction bases for the support of the stucco coating.

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

References

- **ASTM C1007-11a Standard Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories**, 2011. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **ASTM C1063-12a - Standard Specification for Installation of Lathing & Furring to Receive Interior & Exterior Portland Cement Based Plaster**, 2012. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **ASTM C926-12a - Standard Specification for Application of Portland Cement Based Plaster**. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Florida Building Code 2017 - Building**, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Gypsum Construction Handbook**, 2009. ISBN: 978-0876292587. United States Gypsum Corporation, 350 Burnhamthorpe Road West, 5th Floor, Mississauga, ON. Available at www.amazon.com.
- **Introduction to Construction Drawings**, 2009. ISBN: 978-0-13-609915-4. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at <http://nccer.pearsonconstructionbooks.com>.

SWIMMING POOL & SPA CONTRACTOR

Swimming pool/spa Contractor means a contractor whose scope of work involves but is not limited to, the construction, repair and servicing of any swimming pool, or hot tub or spa, whether public, private or otherwise regardless of use. The scope of work includes the installation, repair or replacement of existing equipment, any cleaning or equipment sanitizing which requires at least a partial disassembling, excluding filter changes and the installation of new pool/spa equipment, interior finishes, the installation of package pool heaters, the installation of all perimeter piping and filter piping, and the construction of equipment rooms or housing for pool/spa equipment, and also includes the scope of work of a swimming pool/spa servicing contractor. The scope of such work does not include direct connections to a sanitary sewer system or to a potable water line. The installation, construction, modification, or replacement of equipment permanently attached and associated with the pool or spa for the purpose of water or cleaning of the pool or spa requires licensure; however, the usage of such equipment for the purposes of water treatment or cleaning shall not require licensure unless the usage involves construction, modification, or replacement of such equipment. Water treatment that does not require such equipment does not require a license. In addition, a license shall not be required for the cleaning of the pool or spa in any way that does not affect the structural integrity of the pool or spa or its associated equipment

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	4
Site Preparation, Excavation and Backfilling	4
Pool Shell Construction	12
Interior Surface Preparation and Finishing	6
Pool Equipment and Piping	6
Accessory Work	6
Care and Operation	8
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.
- **Certified Pool/Spa Operator Handbook**, 2009. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. Available at www.nspf.org.
- **Florida Administrative Code, Ch. 64E-9, Public Swimming Pools & Bathing Places**, 2009. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. available at http://www.floridahealth.gov/environmental-health/swimming-pools/_documents/64E-9_FAC_Draft_Rev7_no_strike.pdf Candidate printed versions allowed if exam is open book
- **Florida Building Code 2017 - Building**, 2017. ISBN: 978-1-60983-687-0. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Florida Building Code 2017 - Residential**, 2017. ISBN: 978-1-60983-692-4. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Guide to Shotcrete, 506R.90**, 1995. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. <https://www.concrete.org/store.aspx>

SWIMMING POOL FINISHING CONTRACTOR

Swimming Pool Finishing Contractor means any person or firm qualified and certified by the Board who performs any work limited to the coating or finishing of the interior surfaces of a commercial or residential swimming pool, spa or hot tub with materials such as marcite, water type plaster, fiberglass or other similar use products designed to create a permanent surface coating and which is usually applied with a plasterer's trowel or by pneumatic pressure to a surface which offers an existing mechanical key for the support of such coatings or to which such coating will adhere by suction. Such sub-contractor may also re-finish existing swimming pools, spas or hot tubs, perform minor surface coating repairs, and prepare the surface to be coated for such materials as listed above. The Swimming Pool Finishing sub-contractor shall contract with a certified or registered swimming pool/spa contractor or swimming pool/spa service contractor only.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Materials	10
Substrates	10
Pool Finishing	14
Pool Water Quality	8
Troubleshooting & Repair	8

References

- **ASTM C926-12a - Standard Specification for Application of Portland Cement Based Plaster**. American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Available at <http://www.astm.org/>. Candidate printed versions allowed if exam is open book.
- **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 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
- **National Plasterers Council Technical Manual**, 7th edition. National Plasterers Council, Inc., 1000 N. Rand Rd, suite 214, Wauconda, IL 60084. <https://npconline.site-ym.com/store/>

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

SWIMMING POOL/SPA SERVICING CONTRACTOR

Swimming Pool/Spa Servicing Contractor means a contractor whose scope of work involves, but is not limited to, the repair and servicing of any swimming pool, or hot tub or spa, whether public or private, or otherwise, regardless of use. The scope of work includes the repair or replacement of existing equipment, any cleaning or equipment sanitizing which requires at least a partial disassembling, excluding filter changes, and the installation of new pool/spa equipment, interior refinishing, the reinstallation or addition of pool heaters, the repair or replacement of all perimeter piping and filter piping, the repair of equipment rooms or housing for pool/spa equipment, and the substantial or complete draining of a swimming pool, or hot tub or spa, for the purpose of any repair or renovation. The scope of such work does not include direct connections to a sanitary sewer system or to potable water lines. The installation, construction, modification, substantial or complete disassembly or replacement of equipment permanently attached to and associated with the pool or spa for the purpose of water treatment or cleaning of the pool or spa requires licensure, however, the usage of such equipment for the purposes of water treatment or cleaning shall not require licensure unless the usage involves construction, modification, substantial or complete disassembly or replacement of such equipment. Water treatment that does not require such equipment does not require a license. In addition, a license shall not be required for the cleaning of the pool or spa in any way that does not affect the structural integrity of the pool or spa or its associated equipment.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
Circulation	6
Disinfection	6
Filtration	6
Management	5
Repairs	4
Safety	6
Testing	6
Calculations	5
Pool Equipment and Piping	6

References

- **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.
- **Certified Pool/Spa Operator Handbook**, 2009. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. Available at www.nspf.org.
- **Florida Administrative Code, Ch. 64E-9, Public Swimming Pools & Bathing Places**, 2009. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. available at http://www.floridahealth.gov/environmental-health/swimming-pools/_documents/64E-9_FAC_Draft_Rev7_no_strike.pdf Candidate printed versions allowed if exam is open book

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

UNDERGROUND UTILITIES

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

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

References

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

UTILITY LINE

Utility Line means any pipeline such as a water transmission or distribution line, fire hydrant or fire line, sanitary sewer or storm sewer collection system, empty conduit no smaller than two inches in diameter, force main, lateral or lift station in a dedicated right-of-way or public easement, or the last engineered invert elevation on private property, including piping being installed for drainage purposes, whether on public or private property. Utility lines, continuation of means providing such utility line from the main system to a point of termination as follows:

1. Main water distribution system:
 - a. each individual trailer site within a mobile home park.
 - b. the meter location for an individual occupancy.
 - c. the secondary meter in the case of a master site meter.
2. Sanitary sewer collection system:
 - a. each individual trailer site within a mobile home park.
 - b. the property line for a residential or single occupancy property.
 - c. a manhole or wye lateral extended to an invert elevation as engineered for a multi-occupancy property.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	6
Survey & Layout	4
Sitework	14
Underground Piping Materials & Fittings	8
Underground Pipe Assembly & Installation	8
Safety	10

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>
- **Basic Safety**. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- **Concrete Pipe & Box Culvert Installation Manual**. American Concrete Pipe Association, 222 West Las Colinas Boulevard, Ste. 641, Irving, TX 75063. Available at www.concrete-pipe.org.
- **Damage Prevention Guide**. Sunshine State One Call of Florida, Inc., 11 Plantation Road, DeBary, FL 32713. Available at <http://www.sunshine811.com/CandidatePrintedVersionsPermittedInTestingRoomIfExamIsOpenBook>.
- **FL DOT Utility Accommodation Manual**, 2014. State of Florida, 2600 Blair Road M.S. 3500, Tallahassee, FL 32399. Available at www2.dot.state.fl.us/proceduraldocuments/procedures/bin/710020001/710020001CandidatePrintedVersionsPermittedInTestingRoomIfExamIsOpenBook.
- **Florida Building Code 2020 - Fuel Gas**, 2020. International Code Council, 4051 Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **Florida Building Code 2020 - Plumbing**, 2020. International Code Council, 4051 Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- **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: 978-1-269-70000-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com