# **ORANGE COUNTY - EXAM DESCRIPTIONS**

## **Table of Contents**

ORANG	GE COUNTY - EXAM DESCRIPTIONS	1
	AC COMMERCIAL (2023 EDITION)	1
	ALUMINUM CONSTRUCTION & LIMITED CONCRETE (2023 EDITION	
,	Aluminum Siding (2023 edition)	2
	ALUMINUM STRUCTURES & SPECIALTIES (2023 EDITION)	2
ļ	Building Contractor (2023 edition)	3
	BUILDING CONTRACTOR 2023 (SPANISH)	
1	Burglar & Fire Alarm Electrical 2020	4
1	BUSINESS AND LAW, 2ND EDITION	4
I	Business and Law, 2nd edition (Spanish)	4
(	Carpentry (2023 edition)	4
(	Carpentry 2023 (Spanish)	5
(	Commercial Swimming Pool (2023 edition)	5
(	CONCRETE CONTRACTOR	5
(	CONCRETE FORMING AND PLACING	6
(	CONCRETE FORMING AND PLACING (SPANISH)	6
(	Concrete Placing and Finishing	6
(	Concrete Placing and Finishing (Spanish)	6
	Demolition (2023 edition)	
	Demolition Spanish (2023 edition)	
I	ELECTRICAL SIGN CONTRACTOR 2020	8
	Garage Door Installer Contractor (2023 edition)	
	General Contractor (2023 edition)	
	General Contractor Spanish (2023 edition)	
	Irrigation Sprinkler (2023 edition)	
	Irrigation Sprinkler Spanish (2023 edition)	
	JOURNEYMAN AC (LIMITED) (2023 EDITION)	
	JOURNEYMAN AC (LIMITED) SPANISH (2023 EDITION)	
	Journeyman Air Conditioning (2023 edition)	
	Journeyman Air Conditioning Spanish (2023 edition)	
	JOURNEYMAN BURGLAR ALARM 2020	
	Journeyman Burglar Alarm Spanish (2020 edition)	
	JOURNEYMAN ELECTRICIAN 2020	
	JOURNEYMAN ELECTRICIAN 2020 (SPANISH)	
	JOURNEYMAN GENERAL MECHANICAL (2023 EDITION)	
	JOURNEYMAN GENERAL MECHANICAL SPANISH (2023 EDITION)	
	JOURNEYMAN PLUMBING WITH GAS (2023 EDITION)	
	JOURNEYMAN RESIDENTIAL ELECTRICAL 2020	
	JOURNEYMAN RESIDENTIAL ELECTRICAL 2020 (SPANISH)	
	JOURNEYMAN RESIDENTIAL PLUMBER (2023 EDITION)	
	JOURNEYMAN RESIDENTIAL PLUMBER WITH GAS (2023 EDITION)	
	Journeyman Sheet Metal (2023 edition)	
	JOURNEYMAN SIGN ELECTRICIAN 2020	
	Journeyman Sign Electrician Spanish (2020 edition) Lightning Protection 2020	
	LOW VOLTAGE 2020	
	LOW VOLTAGE 2020 (SPANISH)	
	Marine Construction (2023 edition)	
	Marine Contractor I (2023 edition)	
	MASTER AC (LIMITED) (2023 EDITION)	
	INIMATER AC (FIMILED) (2023 FOLLION)	10

MASTER AC (LIMITED) SPANISH (2023 EDITION)	19
MASTER AC (UNLIMITED) (2023 EDITION)	19
MASTER AC (UNLIMITED) SPANISH (2023 EDITION)	19
MASTER ELECTRICIAN (SPANISH) 2020	20
Master Electrician 2020	
MASTER MECHANICAL (2023 EDITION)	
MASTER PLUMBER WITH GAS (2023 EDITION)	21
MASTER PLUMBER WITH GAS SPANISH (2023 EDITION)	21
MASTER RESIDENTIAL ELECTRICAL 2020	22
MASTER RESIDENTIAL PLUMBER WITH GAS (2023 EDITION)	22
MASTER SHEET METAL (2023 EDITION)	
MASTER TV ANTENNA (2020 EDITION)	22
MECHANICAL MAINTENANCE (2023 EDITION)	
MECHANICAL MAINTENANCE SPANISH (2023 EDITION)	
PILE DRIVING & FOUNDATION ENGINEERING CONTRACTOR	-
EDITION)	
POOL MAINTENANCE (2023 EDITION)	
RESIDENTIAL AC (2023 EDITION)	
RESIDENTIAL CONTRACTOR (2023 EDITION)	25
DECIDENTIAL CONTRACTOR CRANICLI (2022 EDITION)	
RESIDENTIAL CONTRACTOR SPANISH (2023 EDITION)	
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26 26
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26 26 26
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26 26 26 27
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26 26 26 27
RESIDENTIAL SWIMMING POOL (2023 EDITION)	25 26 26 26 27

# **AC Commercial (2023 edition)**

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the installation, maintenance, repair, fabrication, alteration, and extension of commercial air conditioning, warm air heating, ventilation, duct systems, and related appurtenances unlimited in horsepower or tonnage.

Number of Questions 100 Time allowed (hours) 4	100 4	
Subject Area # Q	uest.	
Equipment 20		
General Knowledge 27		
Maintenance 29		
Piping 11		
Plan Reading 3		
Systems & Sizing 10		

## 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 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.
- Modern Refrigeration and Air Conditioning, 21st Edition. ISBN: 978-1-63563-877-6. Goodheart-Wilcox Company, Inc., 18604 West Creek Dr., Tinley Park, IL 60477-6243. Available at www.g-w.com

# <u>Aluminum Construction & Limited Concrete</u> (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the fabrication, installation, repair, alteration and extension of aluminum structures, including screen rooms with solid or screen roofs, metal siding, soffits, gutters, and awnings, with limited concrete work incidental to these structures for footings and slabs.

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

## References

- AAF Guide to Aluminum Construction in High Wind Areas, 2010.
  Aluminum Association of Florida, 13165 McCrory Place, Suite 185,
  Orlando, FL 33432. Available at http://www.aaof.org/. (Also permitted is the Guide to Aluminum Construction in High-Wind Area ASCE7
  Supplement to the 2010 Guide)
- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 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

# **Aluminum Siding (2023 edition)**

A Siding Contractor is qualified to install siding and similar accessories. As regulated under Florida Statute, a person who has passed a competency examination as a Siding Contractor may perform these or related tasks or may supervise persons in his employ in the execution of these tasks.

Number of Questions	25
Time allowed (hours)	2
Subject Area	# Quest.
Acoustical Installation	8
Materials	8
Plan Reading & Estimating	3
Safety	3
Substrates	3

#### 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/
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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

# <u>Aluminum Structures & Specialties (2023</u> edition)

(UPDATED TO 2023 CODE) A contractor whose services consist of the installation, fabrication, maintenance (except for cleaning), repair or design with aluminum, vinyl and fiberglass screen material. The aluminum contractor may work on foundation, slabs on grade and block knee walls, wood decks (self-standing) and utility sheds (wood studs only) less than 501 square feet, necessary to and incidental to the aluminum construction work. The aluminum contractor shall not perform any work that alters the structural integrity of the building and shall not use wood products for rafters, trusses and wood beams.

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

- AAF Guide to Aluminum Construction in High Wind Areas, 2010.
  Aluminum Association of Florida, 13165 McCrory Place, Suite 185,
  Orlando, FL 33432. Available at http://www.aaof.org/. (Also permitted is the Guide to Aluminum Construction in High-Wind Area ASCE7
  Supplement to the 2010 Guide)
- ASTM D4756-06 Standard Practice for Installation of Rigid PVC Siding
   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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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

## **Building Contractor (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	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. httpn://orovexam.com/books.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.
- 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 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 2023 (Spanish)**

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

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

- 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. httpn://orotexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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

## **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 Time allowed (hours)	50 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/americanelectricians-handbook-seventeenth-edition-9781260457919-usa
- Low Voltage Wiring: Security/Fire-Alarm Systems, 2001. ISBN: 978-0071376747. McGraw Hill Glencoe Order Services, P.O. Box 545, Blacklick, OH 43004. Available at www.amazon.com.
- NFPA 70 National Electrical Code 2020, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- Understanding and Servicing Alarm Systems, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.

## Business and Law, 2nd edition

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

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

Number of	Questions	50	
Time allow	ved (hours)	2	
Subject Are	ea	# Quest.	
Business O	rganization	4	
Licensing		3	
Lien laws		3	
Tax Laws		6	
Safety OSH	Α	4	
Labor Laws	3	6	
Contract N	lanagement	5	
Project Ma	nagement	5	
Estimating	& Bidding	5	
Financial M	1anagement	5	
Risk Mana	gement	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.

гΛ

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

Number of Ougstions

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 edition)

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 Time allowed (hours)	50 3
Subject Area	# Quest.
Plan Reading & Estimating	6
Floor Systems	4
Wall & Ceiling Framing	8
Roof Framing	8
Thermal & Moisture Protection	4
Exterior Finishing	4
Cold-Formed Steel Framing	5
Windows, Doors & Stairs	4
Interior Trim	2
Safety	5
References	

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

- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- <u>Study Guide for Residential Carpentry and Repair, 2nd edition</u>, 2014. ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

# **Carpentry 2023 (Spanish)**

Number of Questions

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

EΛ

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

- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Study Guide for Residential Carpentry and Repair, 2nd edition, 2014.
   ISBN: 978-1-269-78561-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

# **Commercial Swimming Pool (2023 edition)**

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

Number of Questions	50
Time allowed (hours)	2

Subject Area	# Quest.
Plan Reading & Estimating	4
Site Preparation, Excavation and Backfilling	5
Pool Shell Construction	14
Interior Surface Preparation and Finishing	10
Tile, Coping and Trimwork	4
Accessory Work	3
Care and Operation	6
Safety	4

#### References

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Swimming Pools: Design and Construction, Fourth Edition. ISBN: 978-0419235903. Taylor and Francis, 270 Madison Avenue, New York, NY 10016. Available at www.amazon.com.

## **Concrete Contractor**

The Concrete Contractor exam tests the candidate's knowledge of the properties, preparation, formwork, reinforcement, placement and the finishing of concrete, including materials, specialized installations and finishes, and concrete quality control and curing. This scope of work includes, but is not limited to concrete piers, foundations, walls, structures, slabs, curbs, sidewalks, and driveways. The scope of work excludes the installation of pool, spa, or hot tub decks; separate licensure is required. {Florida Administrative Code 61G4-15.032(B)(e)}

Number of Questions Time allowed (hours)	50 2
Subject Area	# Quest.
Plan Reading & Estimating	6
Properties of Concrete	4
Preparation for Placement	6
Reinforcement	7
Formwork	7
Placement & Finishing	7
Specialized Installations & Finishes	3
Quality Control & Curing	5
Safety	5

- ACI 318 Building Code Requirements for Structural Concrete 2019, 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0 136868282 OR https://provexam.com/bookstore/.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.

## **Concrete Forming and Placing**

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	6
Properties of Concrete	6
Preparation for Placement	5
Reinforcement	6
Formwork	5
Placement & Finishing	8
Specialized Installations & Finishes	3
Quality Control & Curing	6
Safety	5

## References

- ACI 318 Building Code Requirements for Structural Concrete 2019, 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6.
  Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
  http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0
  136868282 OR https://provexam.com/bookstore/.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.

# **Concrete Forming and Placing (Spanish)**

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	6
Properties of Concrete	6
Preparation for Placement	5
Reinforcement	6
Formwork	5
Placement & Finishing	8
Specialized Installations & Finishes	3
Quality Control & Curing	6
Safety	5

## References

- ACI 318 Building Code Requirements for Structural Concrete 2019,
   2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6.
  Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
  http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0
  136868282 OR https://provexam.com/bookstore/.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.

## **Concrete Placing and Finishing**

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

Number of Questions	40	
Time allowed (hours)	2	
Subject Area	# Quest.	
Plan Reading & Estimating	4	
Properties of Concrete	6	
Preparation for Placement	5	
Reinforcement	3	
Placement & Finishing	7	
Specialized Installations & Finishes	4	
Quality Control & Curing	6	
Safety	5	

### References

- ACI 318 Building Code Requirements for Structural Concrete 2019, 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6.
  Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
  http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0
  136868282 OR https://provexam.com/bookstore/.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.

# **Concrete Placing and Finishing (Spanish)**

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

Number of Questions	40
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	4

Properties of Concrete	6
Preparation for Placement	5
Reinforcement	3
Placement & Finishing	8
Specialized Installations & Finishes	4
Quality Control & Curing	6
Safety	4

- ACI 318 Building Code Requirements for Structural Concrete 2014, 2014. ISBN: 978-0-87031-930-3. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org/.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0 136868282 OR https://provexam.com/bookstore/.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/books.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.

# **Demolition (2023 edition)**

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, 2022 edition, 2022. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- 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
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- <u>Ironworking Level One</u>, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

- 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 (2023 edition)**

(UPDATED TO 2023 CODE) 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 Time allowed (hours)	50 2
Time anowed (nours)	2
Subject Area	# Quest.
Plan Reading & Interpretation	7
Structural Concrete	4
Structural Masonry	5
Structural Framing	4
Structural Steel	6
Blasting	6
Rigging and Cranes	8
Safety	10

- 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
- <u>Ironworking Level One</u>, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- 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,

## **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.

# Garage Door Installer Contractor (2023 edition)

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Garage Doors Installation	18
Garage Doors, Materials & Hardware	17
Garage Door Service, Repair & Maintenance	9
Safety	6

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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-tehnical-data-sheets.asp.
  Candidate printed versions allowed if exam is open book.
- <u>TDS 156 Standard Wood Header and Jamb Detail Guidelines</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasma-pages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 157 Garage Doors and Foam Plastic</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 158 Glazing in Garage Doors</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 160 Sectional Garage Door Terminology</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-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-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 162 Wood Door Finishing Guidelines</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 163 Garage Door R-Value</u>. Door and Access Systems
  Manufacturers Association International, 1300 Sumner Avenue,
  Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-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-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 165 Garage Door Manual Operation</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-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-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book.

- <u>TDS 167 Sectional Garage Door & Electric Operator Checklist for Home Inspectors and Consumers</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 172 Garage Door Labels</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 179 Wood Garage Door Inspection and Maintenance Guidelines</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasma-pages/DASMA-tehnical-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-tehnical-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-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book
- <u>TDS 260 Common Rolling Steel Door Installation Problems</u>. Door and Access Systems Manufacturers Association International, 1300 Sumner Avenue, Cleveland, OH 44115-7333. Available at https://dasma.com/dasma-pages/DASMA-tehnical-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/dasmapages/DASMA-tehnical-data-sheets.asp. Candidate printed versions allowed if exam is open book

# **General Contractor (2023 edition)**

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

- <u>Carpentry Level One, 2022 edition</u>, 2022. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Concrete Construction Level 2, 2021. ISBN: 978-0-13-689832-0. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. httpn://provexam.com/store/product.aspx?isbn=0136868282 OR https://provexam.com/bookstore/.
- 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 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 (2023 edition)**

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.

o٨

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

Number of Questions

- ACI 530 Building Code Requirements and Specification for Masonry Structures 2013, 2013. ISBN: 978-1-929081-43-1. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333. Available at http://www.concrete.org OR http://www.techstreet.com/searches/16672726 OR amazon.com
- <u>Carpentry Level One, 2022 edition</u>, 2022. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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.
- <u>Study Guide for Commercial Carpentry, 2nd Edition</u>, 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 (2023 edition)**

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 2023 Plumbing, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- <u>Turf Irrigation Manual The Complete Guide to Landscape Irrigation</u>

  <u>Design</u>, 5th Ed., 1994. ISBN: 978-0963509604. Weathermatic, P.O.

  Box 180205, Dallas, TX 75218-0205. Available at www.amazon.com.

# **Irrigation Sprinkler Spanish (2023 edition)**

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
- Florida Building Code 2023 Plumbing, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 AC (Limited) (2023 edition)

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

Number of Questions Time allowed (hours)	100 4
Subject Area	# Quest.
General Knowledge	22
Piping	10
Systems & Sizing	25
Equipment	15
Maintenance	22
Plan Reading	6

- 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 AC (Limited) Spanish (2023 edition)

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

Number of Questions Time allowed (hours)	100 4
Subject Area	# Quest.
General Knowledge	22
Piping	10
Systems & Sizing	25
Equipment	15
Maintenance	22
Plan Reading	6

#### 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 (2023 edition)

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 3
Time allowed (hours)	
Cubiast Auga	# O
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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 (2023 edition)

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 Time allowed (hours)	100 3
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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 Burglar Alarm Spanish (2020 edition)

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 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

- 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 General Mechanical (2023 edition)

(UPDATED TO 2023 CODE) Journeyman General Mechanical: The term 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. In addition, any work in the trade concerned on any such job site wherein journeymen are not provided in accordance with this section shall be stopped by the enforcing

agency or administrative agency concerned until journeymen are so provided. Further, any person working at a trade which requires journeymen on the job site where no journeyman or master in the trade concerned is present shall be in violation of this chapter and 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 Time allowed (hours)	60 3
Subject Area	# Quest.
General Knowledge	9
Piping	6
Equipment	13
Maintenance	10
Plan Reading	4
Systems & Sizing	18

#### 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.
- HVAC Level 2 2013, 2013. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.
- HVAC Level 3 2013, 2013. Prentice Hall, P.O. Box 11071, Des Moines,
- 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

# Journeyman General Mechanical Spanish (2023 edition)

Journeyman General Mechanical: The term 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. In addition, any work in the trade concerned on any such job site wherein journeymen are not provided in accordance with this section shall be stopped by the enforcing agency or administrative agency concerned until journeymen are so provided. Further, any person working at a trade which requires journeymen on the job site where no journeyman or master in the trade concerned is present shall be in violation of this chapter and 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	60
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	9
Piping	6
Equipment	13
Maintenance	10
Plan Reading	4
Systems & Sizing	18

## 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.
- <u>HVAC Level 2 2013</u>, 2013. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.
- <u>HVAC Level 3 2013</u>, 2013. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336.
- 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

# Journeyman Plumbing with Gas (2023 edition)

(UPDATED TO 2023 CODE) 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	13
Fixtures & Fittings	8
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

**Number of Ouestions** 

- 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.

65

rumber of Questions	05
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

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

# Journeyman Residential Electrical 2020 (Spanish)

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.

65

Number of Questions	05
Time allowed (hours)	3
, ,	
Subject Area	# Quest.
Communication Systems	5
Equipment for General Use	7
General Electrical Knowledge	15
Motors & Controls	5
Special Conditions	3
Special Equipment	2
Special Occupancies	3
Wiring & Protection	15
Wiring Methods & Materials	10

## References

Number of Ouestions

- 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.

# <u>Journeyman Residential Plumber (2023 edition)</u>

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the installation, repair, maintenance, and extension of a plumbing system, including drains, waste, sanitary vents, water supply, and fixtures as it applies to one and two-family residences, also multiple single-family dwellings (townhouses) not more than three stories in height.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Drain, Waste & Vent Systems	10
Fixtures & Fittings	8
General Knowledge	10

Isometrics & Plan Reading	10
Plumbing Math	9
Storm & Roof Drainage	4
Water Heaters	10
Water Supply and Distribution	10
Safety	4

#### References

- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 Residential Plumber with Gas (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the installation, repair, maintenance, and extension of a plumbing system, including drains, waste, sanitary vents, water supply, and fixtures; installation, maintenance, and repair of a gas system, including piping, appliances, vents, flues, tanks, and related appurtenances as it applies to one- and two-family residences, also multiple single-family dwellings (townhouses) not more than three stories in height.

Number of Questions	75
Time allowed (hours)	3
Subject Area	# Quest.
Drain, Waste & Vent Systems	14
Fuel Gas Systems	6
Fixtures & Fittings	8
General Knowledge	12
Isometrics & Plan Reading	10
Plumbing Math	10
Safety	4
Storm & Roof Drainage	3
Water Heaters	4
Water Supply and Distribution	4

## References

- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 Sheet Metal (2023 edition)

(UPDATED TO 2023 CODE) 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

## Time allowed (hours)

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

3

#### References

- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Sheet Metal Level 1, 2019. ISBN: 978-0-13-662951-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- <u>Sheet Metal Level 2</u>, 2019. ISBN: 978-0-13-663023-4. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Sheet Metal Level 3, 2019. ISBN: 978-0-13-663060-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

## 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.

# <u>Journeyman Sign Electrician Spanish (2020 edition)</u>

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 Time allowed (hours)	40 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 2020**

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.

50

5

Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	10
Hazardous Structures	5
Heavy Duty Stacks	6
Ordinary Structures	10
Safety	4
Special Occupancies	5
Wind Turbines and Watercraft	5

### References

**Explosive Materials** 

**Number of Questions** 

 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.
- NFPA 780 Standard for the Installation of Lightning Protection
   Systems, 2011. National Fire Protection Association, 1 Batterymarch
   Park, Quincy, MA 02169-7471. Available at www.nfpa.org.

# **Low Voltage 2020**

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

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
General Electrical Knowledge	12
Wiring and Protection	5
Wiring Methods & Materials	10
Equipment for General Use	3
Special Occupancies	4
Special Equipment	4
Special Conditions	4
Communication Systems	8

## References

- American Electrician's Handbook, 17th Edition. ISBN: 978-1260457919. McGraw Hill Publishing Inc., P.O. Box 182604, Columbus, OH 43272. Available at https://www.mhprofessional.com/americanelectricians-handbook-seventeenth-edition-9781260457919-usa
- NFPA 70 National Electrical Code 2020, 2020. ISBN: 9781455922970. National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. Available at www.nfpa.org.
- Understanding and Servicing Alarm Systems, 3rd Ed., 1999. ISBN: 978-0750672061. Butterworth-Heinemann, 225 Wildwood Ave., Woburn, MA 01801. Available at www.amazon.com.

# Low Voltage 2020 (Spanish)

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 Time allowed (hours)	50 2
Subject Area	# Quest.
Communication Systems	5
Equipment for General Use	4
General Electrical Knowledge	12
Special Conditions	4
Special Equipment	3
Special Occupancies	3
Wiring and Protection	9
Wiring Methods & Materials	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
- 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.

## **Marine Construction (2023 edition)**

(UPDATED TO 2023 CODE) 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.

75

Time allowed (hours)	75 3
Time allowed (nours)	3
Subject Area	# Quest.
Carpentry	10
Florida Building Code application to Marine	10
Structures	
Piles	10
Plan Reading & Estimating	6
Safety	9
Sitework	10
Structures	10
Concrete and Reinforcement	10

## References

Number of Questions

- 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/CurrentReleas e/Vol2\_SDM.pdf Candidate printed versions allowed if exam is open book.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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
- <u>Pile Design and Construction Practice</u>, 5th. ISBN: 978-0415385824.
   Taylor and Francis, 270 Madison Avenue, New York, NY 10016.
   Available at www.Contractor-books.com
- Standard Specifications for Road and Bridge Construction, 2013.
  State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. Available at www.dot.state.fl.us. Candidate printed versions allowed if exam is open book.
- Study Guide for General Engineering, 3rd edition, 2014. ISBN: 978-1-269-78657-7. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- <u>The Dock Manual: Designing/Building/Maintaining</u>, 1999. ISBN: 978-1-58017-098-7. Storey Publishing, 210 MASS MoCA Way, North Adams, MA 01247. https://www.storey.com/books/the-dock-manual/#

# Marine Contractor I (2023 edition)

(UPDATED TO 2023 CODE) Marine Contractor I means any person or firm qualified and certified by the Board to perform any work involving the construction, repair, alteration, extension and excavation for docks, seawalls, bulkheads, piers, wharfs, boatlifts and other marine structures, including pile driving, wood framing and roofing in conjunction with the erection of wood structures being constructed consistent with the marine work that is being done. This wood structure is not to be used for habitation or office space. He may do such concrete work as may be necessary and incidental to his work in compliance with the building code and other applicable codes and regulations.

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

## References

Code of Federal Regulations, Title 29 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

- 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 2015, 2015. State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. http://www.dot.state.fl.us/structures/StructuresManual/CurrentReleas e/Vol2 SDM.pdf Candidate printed versions allowed if exam is open ...
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Fundamentals of Hydraulic Dredging, 1996. ISBN: 9780784401477.
  American Society of Civil Engineers, 1800 Alexander Bell Drive, Reston, VA 20191. https://www.asce.org/templates/publications-bookdetail.aspx?id=7971
- Pile Design and Construction Practice, 5th. ISBN: 978-0415385824.
  Taylor and Francis, 270 Madison Avenue, New York, NY 10016.
  Available at www.Contractor-books.com
- Standard Specifications for Road & Bridge Construction 15, 2015.
   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) (2023 edition)

(UPDATED TO 2023 CODE) 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.

100

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

## References

**Number of Questions** 

- Advanced Mechanical Study Guide, 2nd edition, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.

- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 (2023 edition)

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.

100 4
# Quest.
18
19
20
15
23
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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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) (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the design, installation, maintenance, repair, fabrication, alteration & extension of Ac/refrigeration, piping vessels, warm air heating, low and high pressure boilers, ventilation systems, duct systems, insulation & related appurtenances within a complete system unlimited in horsepower or tonnage.

Number of Questions Time allowed (hours)	100 4
Subject Area	# Quest.
Piping	18
Equipment	14
Maintenance	22
Plan Reading	7
Systems & Sizing	20
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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 (2023 edition)

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

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

- Advanced Mechanical Study Guide, 2nd edition, 2nd. ISBN: 9781323725184. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 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

#### 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

20

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 (2023 edition)**

(UPDATED TO 2023 CODE) 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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 (2023 edition)

(UPDATED TO 2023 CODE) 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

Number of Questions

- 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 Plumber with Gas Spanish (2023 edition)

(UPDATED TO 2023 CODE) 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.

100

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

- 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 Time allowed (hours)	65 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 Residential Plumber with Gas (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the design, installation, repair, maintenance, and extension of a plumbing system, including drains, waste, sanitary vents, water supply, and fixtures; design, installation, maintenance, and repair of a gas system, including piping, appliances, vents, flues, tanks, and related appurtenances as it applies to one- and two-family residences, also multiple single-family dwellings (townhouses) not more than three stories in height.

Number of Questions Time allowed (hours)	100 3
Subject Area	# Quest.
Drain, Waste & Vent Systems	10
Fuel Gas Systems	12
Fixtures & Fittings	8
General Knowledge	10

Isometrics & Plan Reading	18
Plumbing Math	7
Safety	6
Storm & Roof Drainage	4
Water Heaters	7
Water Supply and Distribution	18

#### References

- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Plumbing Basics for Contractors, 3rd Edition, 2014. ISBN: 978-1-269-78624-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com

# Master Sheet Metal (2023 edition)

(UPDATED TO 2023 CODE) Sheet Metal Contractor is a specialty mechanical contractor qualified and certified to manufacture, assemble, cast, cut, shape, stamp, forge, fabricate, weld, repair, recondition, adjust and install sheet and rolled metal of any kind or combination and all other materials used in lieu thereof, and including all air-veyor systems and air handling systems regardless of materials used including all equipment and all reinforcements in connection therewith.

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

## References

- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- <u>Sheet Metal Level 1</u>, 2019. ISBN: 978-0-13-662951-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Sheet Metal Level 2, 2019. ISBN: 978-0-13-663023-4. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Sheet Metal Level 3, 2019. ISBN: 978-0-13-663060-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Sheet Metal Level 4, 2019. ISBN: 978-0-13-663222-1. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

# 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 Time allowed (hours)	75 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.

# Mechanical Maintenance (2023 edition)

(UPDATED TO 2023 CODE) Mechanical Maintenance man is a person qualified and certified by examination to maintain mechanical installations. The work of a mechanical maintenance man shall be confined to repairing, maintaining, servicing of existing systems involving air conditioning, refrigeration, heating, ventilation and pressure and process piping contained and used upon the premises or building owned, occupied or otherwise controlled by the person, firm or corporation by whom the mechanical maintenance man is regularly employed. A certified mechanical master or journeyman shall automatically qualify as a mechanical maintenance man.

Number of Questions Time allowed (hours)	50 3
<b>Subject Area</b>	<b># Quest.</b>
General Knowledge	6
Piping	6

Equipment	10
Maintenance	18
Plan Reading	3
Systems & Sizing	7

### 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.

# Mechanical Maintenance Spanish (2023 edition)

Mechanical Maintenance man is a person qualified and certified by examination to maintain mechanical installations. The work of a mechanical maintenance man shall be confined to repairing, maintaining, servicing of existing systems involving air conditioning, refrigeration, heating, ventilation and pressure and process piping contained and used upon the premises or building owned, occupied or otherwise controlled by the person, firm or corporation by whom the mechanical maintenance man is regularly employed. A certified mechanical master or journeyman shall automatically qualify as a mechanical maintenance man.

Number of Questions	50
Time allowed (hours)	3
Subject Area	# Quest.
General Knowledge	6
Piping	6
Equipment	10
Maintenance	18
Plan Reading	3
Systems & Sizing	7

- 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.

- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.

# <u>Pile Driving & Foundation Engineering</u> Contractor (2023 edition)

(UPDATED TO 2023 CODE) A Pile Driving & Foundation Engineering Contractor is an engineering contractor who has a qualifying agent with the experience and skill gained by not less than two (2) years as a general superintendent for a general building or general engineering contractor or education equivalent thereto, or a combination thereof, and qualified and certified to drive piling including sheet piling and construct foundations including the excavating, forming and placing of reinforcing steel and concrete and perform other work incidental thereto.

Time allowed (hours)	50 2
Subject Area	# Quest.
Sitework and Soils	5
Excavating	5
Foundations & Piling	10
Concrete Forming, Reinforcement & Placing	10
Pile Installation	8
Estimating and Plan Reading	6
Safety & Rigging	6

### References

- ACI 318 Building Code Requirements for Structural Concrete 2019, 2019. American Concrete Institute, 38800 International Way, Country Club Dr, P.O. Box 9094, Farmington Hills, MI 48333.
- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Concrete Construction Level 1, 2021. ISBN: 978-0-13-686828-6. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. http://nccer.pearsonconstructionbooks.com/store/product.aspx?isbn=0 136868282 OR https://provexam.com/bookstore/.
- Damage Prevention Guide. Sunshine State One Call of Florida, Inc., 11 Plantation Road, DeBary, FL 32713. Available at http://www.sunshine811.com/ Candidate printed versions permitted in testing room if exam is open book.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Pile Design and Construction Practice, 5th. ISBN: 978-0415385824. Taylor and Francis, 270 Madison Avenue, New York, NY 10016. Available at www.Contractor-books.com
- Standard Specifications for Road and Bridge Construction, 2013.
  State of Florida, 2600 Blair Stone Road M.S. 3500, Tallahassee, FL 32399. Available at www.dot.state.fl.us. Candidate printed versions allowed if exam is open book.

 Study Guide for 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

## **Pool Maintenance (2023 edition)**

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of service, maintenance, and treatment of water in all swimming pools, spas, and hot tubs. Includes equipment, pumps, filters, chemical feeders, and minor repairs to pool masonry, patching cracks, and repainting and resurfacing pool walls and bottoms.

50

Number of Questions	30
Time allowed (hours)	3
Subject Area	# Quest.
Calculations	8
Filtration	6
Circulation	8
Disinfection	7
Testing	8
Management	3
Repairs	4
Safety	6

#### References

Number of Questions

- 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Pool & Spa Operator Handbook 2014, 2014. ISBN: 0-9845863-7-0. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. www.nspf.org

## Residential AC (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the installation, maintenance, repair, alteration, and extension of residential air conditioning systems, related warm air heating, ventilation, and duct systems, not to exceed five tons cooling capacity per unit.

Number of Questions	100
Time allowed (hours)	3
Subject Area	# Quest.
Equipment	16
General Knowledge	16
Maintenance	24
Piping	8
Plan Reading	2
Systems & Sizing	34

- 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 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Fuel Gas, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.

## **Residential Contractor (2023 edition)**

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

- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.

# Residential Contractor Spanish (2023 edition)

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

- <u>Basic Safety</u>. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- 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.

# **Residential Swimming Pool (2023 edition)**

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the construction, service, and repair of residential swimming pools. Does not include direct connections to a sanitary sewer system nor to potable water lines, nor the grounding and bonding of metal surfaces, nor the making of any electrical connections.

Number of Questions Time allowed (hours)	50 3
Subject Area	# Quest.
Plan Reading & Estimating	5
Site Preparation, Excavation and Backfilling	6
Pool Shell Construction	13
Interior Surface Preparation and Finishing	6
Tile, Coping and Trimwork	5
Accessory Work	5
Care and Operation	6
Safety	4

- Basic Safety. ISBN: 9781323676189. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at www.provbookstore.com.
- <u>Builder's Guide to Swimming Pool Construction</u>, 2005. ISBN: 978-1889892504. Builder's Book, Inc., 8001 Canoga Avenue, Canoga Park, CA 91304. Available at www.amazon.com.
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.

## Roofing Spanish (2023 edition)

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

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

## References

- Core 2015, 27202-13 Roofing Applications, & 27403-14 Advanced Roof
   Systems. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/

- Or, if the book above is unavailable, it may be substituted by the following. Substitute references shown below..
- Roofing Study Guide, 2018. ISBN: 978132388055. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.

## **Roofing Unlimited (2023 edition)**

(UPDATED TO 2023 CODE) 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 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.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 (2023 edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of siding, window and door installation including vinyl, wood or aluminum siding, soffit, fascia, gutters and all types of windows and doors. This includes the work necessary to prepare or repair the substrate to accomplish proper installation. Does not include any structural alterations.

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

- 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 Siding & Finish Carpentry, 2nd Edition. ISBN: 9781323963364. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com.

## Sign Contractor (Non-Electric) (2023 edition)

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

Number of Questions Time allowed (hours)	49 2
Subject Area	# Quest.
Plan Reading	4
Concrete and Reinforcement	9
Wood	6
Structural Steel	8
Welding	7
Non-Electric Sign	8
Safety	7

#### References

- Carpentry Level One, 2022 edition, 2022. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116.
- Carpentry Level Three 2014, 2014. ISBN: 0133823059. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.
- Florida Building Code 2020 Building, 2020. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. www.iccsafe.org
- <u>Ironworking Level One</u>, 2011. ISBN: 978-0-13-213714-0. Prentice Hall, P.O. Box 11071, Des Moines, IA 50336. Available at http://nccer.pearsonconstructionbooks.com.

# **Solar Water Heating Contractor (2023)** edition)

(UPDATED TO 2023 CODE) Tests a candidate's knowledge of the installation, alteration, repair, and replacement of any solar heating system including swimming pool applications. Includes collectors, storage and expansion tanks, heat exchangers, piping, valves, pumps, sensors, and low voltage controls that connect to existing plumbing and electrical circuits.

Number of Questions	50
Time allowed (hours)	2
Subject Area	# Quest.
Plan Reading & Estimating	5
Florida Building Code application to Solar	5
Heating	
Solar Concepts	6
Solar Water Heating Systems	6
Solar Water Heating System Installation	6
Solar Water Heating System Troubleshooting	6

Swimming Pool Heating Systems	6
Materials	5
Safety	5

#### References

- Florida Building Code 2023 Energy Conservation, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Florida Building Code 2023 Mechanical, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- Plumbing Basics for Contractors, 3rd Edition, 2014. ISBN: 978-1-269-78624-9. Pearson, 501 Boylston Street, Suite 900, Boston, MA 02116. Available at www.provbookstore.com
- Solar Water and Pool Heating Manual, 2006. ISBN: FSEC-IN-24. University of Central Florida - UCF FL Solar Energy Center, 1679 Clearlake Road, Cocoa, FL 32922-5703. https://secure.fsec.ucf.edu/fsecstore/do/product/Publications/SWPHM anual

# **Swimming Pool Maintenance Unlimited** (2023 edition)

(UPDATED TO 2023 CODE) Swimming Pool Maintenance Contractor (unlimited) is a contractor qualified and certified to do the work of a swimming pool maintenance contractor (limited) and is covered by the same definition except that the swimming pool maintenance contractor (unlimited) shall be able to carry on all such work in connection with both private and public pools.

Number of Questions Time allowed (hours)	75 3
Subject Area	# Quest.
Calculations	9
Circulation	10
Disinfection	10
Filtration	14
Management	7
Repairs	5
Safety	10
Testing	10

- 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/swimmingpools/\_documents/64E-9\_FAC\_Draft\_Rev7\_no\_strike.pdf Candidate printed versions allowed if exam is open book
- Florida Building Code 2023 Building, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478. https://shop.iccsafe.org/
- Florida Building Code 2023 Residential, 2023. International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478.
- <u>Pool & Spa Operator Handbook 2014</u>, 2014. ISBN: 0-9845863-7-0. National Swimming Pool Foundation, 4775 Granby Circle, Colorado Springs, CO 80919. www.nspf.org