

Department of Examinations and Assessment

Louisiana State Licensing Board for Contractors

LSLBC

Electrical Work Statewide

Electrical Work Statewide Construction is an **open** book examination with 80 multiple-choice questions which are equally weighted. You will have **four hours** to complete this examination.

Listed below is only a sample of the many good references available on this subject which may be helpful in studying for this examination. This is not a comprehensive listing. Please note that it is not necessary to read all of the books in order to pass the examination. Rather, this list is intended to suggest what types of books might be useful in helping to acquire the basic knowledge needed to perform this type of work.

We try to keep this list current with books in print, but some books go out of print from time to time. These books may be available in your local library's collection or through your local library by using the services of Inter-Library Loan.

If still in print, these books may also be available through your local bookstore or by contacting the publisher.

All references available via the internet are followed by the appropriate website address for obtaining the reference. From time to time, website addresses may change and no longer be available. In such cases, please search for the appropriate new website address or contact the publisher or a library to obtain a copy.

Under the Contractors' Licensing Law (La. R.S. 37: 2150-2192), an electrical contractor is defined as "any person who undertakes to, attempts to, or submits a price or bid or offers to construct, supervise, superintend, oversee, direct, or in any manner assume charge of the construction, alteration, repair, improvement, movement, demolition, putting up, tearing down, or furnishing labor together with material and equipment, or installing the same for the wiring, fixtures, or appliances for the supply of electricity to any residential, commercial, or other project, when the cost of the undertaking exceeds the sum of ten thousand dollars."

Please note that contractors holding the classification of Electrical Work (Statewide) are exempted from all local electrical licensing exams, but must still acquire any required local licenses.

Differences in Electrical Work Classifications

Electrical Work (Statewide) – May bid, contract and perform any kind of electrical work without limit anywhere throughout the state. Exempt from any local licensing exam. Local license must still be obtained as required. Employees not required to hold a separate license to perform electrical work or pull permits. Exempt from all Fire Marshal licensing requirements for Life Safety and/or Property Protection licensing. Although their law does not back this regulation, State Fire Marshal maintains that service work on burglar alarms lines or closed circuit television lines, or new panel box terminations for burglar alarms and closed circuit television must be performed by a contractor, subcontractor, or employee of the contractor or subcontractor who holds the appropriate license with the Fire Marshal's Office.

Electrical Work (Restricted) - May bid, contract and perform any kind of electrical work without limit anywhere throughout the state. Must take any local licensing exam required for any local license and obtain local license as required. Employees can be required to obtain separate local license and/or take separate local exam.

Electrical Work (Act 725 – Restricted) - May bid, contract and perform any kind of electrical work without limit but only within the parishes stated on the license. Exempt from any local licensing exam. Local license must still be obtained as required. Employees not required to hold a separate license to perform electrical work or pull permits.

References

The following references ONLY will be provided for use at the testing site.

No other references or materials will be allowed.

National Electrical Code, NFPA 70-2008; National Fire Protection Association; Batterymarch Park, Quincy, MA; 2008.

Ugly's Electrical References, Revised 2008 Edition; Hart, George V.; Jones and Bartlett Publishers; Sudbury, MA; 2008.

Code of Federal Regulations, Title 29, Labor, Part 1926, Revised as of July 1, 2009; U. S. Government Printing Office; Washington, DC; 2009. This publication can be obtained as a hard copy at: <http://bookstore.gpo.gov/baskets/cfr-listing.jsp> or as an electronic copy at: www.gpo.gov/fdsys/pkg/CFR-2011-title29-vol8/pdf/CFR-2011-title29-vol8.pdf

Lineman's & Cableman's Handbook, 12th Edition; Shoemaker, Thomas and Mack, James; McGraw-Hill; New York; 2011.

*In addition to the references listed above, the reference materials below should be helpful to candidates in preparing for this exam. These materials may NOT contain all of the information needed to be competent in this trade or to pass the examination. The materials below will **NOT** be allowed for use on the examination.*

Standard for Good Workmanship in Electrical Construction, NECA 1-2006; National Electrical Contractors Association; Bethesda, MD; 2006.

Electrical Theory: Simply Explained - Thoroughly Understood; Walker, Alvin J.; Wisdom House Books, Inc.; 2011. This publication can be found at www.alvinwalker.com.

National Fire Alarm Code, NFPA 72; National Fire Protection Association; Batterymarch Park, Quincy, MA; 2007.

Standard for Electrical Safety in the Workplace, NFPA 70E; National Fire Protection Association; Batterymarch Park, Quincy, MA; 2012.

Direct Current Fundamentals, Eighth Edition; Herman, Stephen L.; Thomson Delmar Learning; Clifton Park, NY; 2011.

Alternating Current Fundamentals, Eighth Edition; Herman, Stephen L.; Thomson Delmar Learning; Clifton Park, NY; 2010.

Electric Motor Control, Ninth Edition; Herman, Stephen L.; Thomson Delmar Learning; Clifton Park, NY; 2009.

The following contract documents from the American Institute of Architects should be reviewed: A 101 – 2007, A 102 – 2007, A 103 – 2007, A 107 – 2007, A 201 – 2007, A 310 – 2007, A 401 - 2007, A 503 – 2007, B 101 – 2007, B 102 – 2007. A review of the information contained in these documents can be found at: www.aia.org/contractdocs/AIAS076659

American Electrician's Handbook, Sixteenth Edition; Croft, Terrell et. al.; McGraw-Hill, Inc.; New York; 2013.

Louisiana Driver's Guide Classes D and E; Louisiana Department of Public Safety and Corrections; Baton Rouge, LA; 2010. This publication can be found at: <http://dpsweb.dps.louisiana.gov/omvpubs.nsf>

Contractor's Guide to Business, Law and Project Management, Louisiana 11th Edition; National Association of Contractor's Licensing Agencies; Scottsdale, AZ; 2013. (NOTE: This is the study guide for the Business and Law exam.) Examinees not taking the Business and Law examination may obtain this publication from: <https://store.nascla.org/louisiana-nascla-contractors-guide-business-law-and-project-management-la-11th-edition>

Exam Content Outline

All electrical contractors must obtain a state contractors license for electrical work to perform any job over \$10,000. Contractors applying for the classification of Electrical Work (Statewide) must pass the Board's examination for Electrical Work. Following is a list of the subject areas along with the approximate percentages of questions allotted to each subject on the test.

Code and Craft	% of Exam
Perform electrical calculations (e.g., branch circuits, feeders, services), including but not limited to code calculations	15
Implement grounding and bonding per code in order to assure safety in the installation	11
Install and/or monitor electrical systems in accordance with state and national codes and industry-accepted standards (e.g., American Electricians Handbook, NEC, NEMA, NEIS, IEEE, any recognized testing laboratory)	11
Recognize non-compliant code items in electrical designs and/or installations (e.g., conduit and conductor size, wiring diagrams, transformer sizes, panel board sizes)	6
Recognize and comply with system safety requirements impacting installation (e.g., clearance requirements, arcflash [OSHA] and blast, LO/TO [Lock out/tag out])	6
Recognize and comply with system safety requirements designed to protect end user	7
Install temporary service (e.g., carnivals, festivals, fairs)	3
Install temporary power (for construction purposes, special occupancy)	4
Install and maintain Class 3 wiring systems	4
Install and maintain systems for emerging technologies (e.g., solar systems, fuel cells/electrical vehicles, wind generators)	4
Interpret diagrams and schematics	7
Install systems so as to prevent the spread of flame or smoke	3
Electrical Contracting Business	81
<i>Total Code and Craft</i>	
Comply with federal, state and local safety regulations	2
Prepares bids and pricing in accordance with requirements of bid submission process	7
Schedule inspections by regulatory and non-regulatory agencies	2
Manage project requirements	4
Obtain certifications and approvals for special inspections (e.g., fire alarm, special locking arrangements)	2
Communicate with employees, suppliers, clients, public entities and other key stakeholders	1
Demonstrate leadership and supervisory ability	1
<i>Total Electrical Contracting Business</i>	19