

# **ELECTRICAL**



# **CODE PAMPHLET**

**TO BE USED IN CONJUNCTION  
WITH THE  
2014 NATIONAL ELECTRICAL CODE**



This pamphlet is to be used in conjunction with the *2014 National Electrical Code*, as published by the National Fire Protection Association. All electrical installations in the City shall be done in accordance with the latest edition of the National Electrical Code, as it is adopted by the City of Abilene. In the event of any conflict between the Code and this pamphlet, the stricter provision shall apply. This pamphlet and the *2014 National Electrical Code* comprise the Electrical Code for the City of Abilene, Texas

This code was adopted by the City Council on January 28, 2016, as Ordinance No. 04-2016 of the Municipal Code, with an effective date of March 1, 2016.

<b>Building Inspections</b>	
555 Walnut St., Room 100 .....	676-6273
<b>Electrical Inspectors.....</b>	<b>676-6276</b>
.....	676-6352

*The following are Administrative Provisions which have been tailored to code enforcement and are specifically geared to electrical code enforcement. The amendments are specific provisions for the City of Abilene, and together, with the published Administrative Provisions, comprise this portion of the Electrical Code.*

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CHAPTER 8, ARTICLE VI, DIVISION 3, SECTION 8-496 ELECTRICAL CODE

*{Add an Article 80 – Administration and Enforcement as follows:}*

**ARTICLE 80  
CHAPTER 1  
TITLE AND GENERAL**

**Title**

**101.** These regulations shall be known as the “Electrical Code”, may be cited as such and will be referred to herein as “this code”.

**Application to Existing Electrical Systems and Equipment**

**102. (a) Additions, Alterations, or Repairs.** Additions, alterations, or repairs may be made to an electrical system and equipment to comply with all the requirements of this code, provided the addition, alteration or repair conforms to that required for a new electrical system and equipment, and provided further that no hazard to life, health or safety will be created by such additions, alterations or repairs.

Minor additions, alterations and repairs to existing electrical system and equipment may be made in accordance with the law in effect at the time the original installation was made, when approved by the Electrical Inspector.

**(b) Existing Installations.** Electrical systems and equipment lawfully in existence at the time of the adoption of this code may have their use, maintenance or repair continued, if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property has been created by such electrical system and equipment

**(c) Changes in Building Occupancy.** Electrical systems and equipment which are a part of any building or structure undergoing a change in use or occupancy, as defined in Building Code, shall comply with the requirements of this code which are applicable to the new use or occupancy.

**(d) Maintenance.** All electrical systems and equipment, both existing and new, and all parts thereof, shall be maintained in a proper operating condition in accordance with the original design and in a safe and hazard-free condition. All devices or safeguards, which are required by this code, shall be maintained in conformance with this code. The owner, or designated agent, shall be responsible for the maintenance of the electrical system. To determine compliance with this subsection, the Building Official may cause any electrical system to be reinspected.

**(e) Moved Building.** Electrical systems and equipment, which are a part of buildings or structures moved into or within this jurisdiction, shall comply with the provisions of this code for new installations.

**(f) Residential Rehabilitated and Condemned Buildings.** Existing buildings which have been condemned may have existing serviceable electrical systems left in place, provided these systems were installed in accordance with the standards applicable at the time the building was built, and further provided that the following minimum provisions are met:

**1. Services:**

- a. All exterior service equipment shall be of weatherproof materials, fittings and devices.
- b. Latest approved service mast heights and points of attachment to structures shall be maintained.
- c. Services shall be of a capacity large enough to carry anticipated load. No service conductor shall be less than 100 amps.

**2. Circuits:**

- a. Existing two conductor non-metallic sheathed cable, if in safe condition, shall be allowed to remain with the addition of a single grounding conductor run separately to outlets located in bathroom, kitchen countertops, and laundry room areas. In lieu of grounding wire, a GFCI outlet may be substituted.
- b. Other conforming wiring methods, not presently approved by the City of Abilene Electrical Code, may remain, if in safe condition, and not disturbed in any manner, other than reconnection to an electrical panel, provided also that these systems were legal at the time of original installation.
- c. Receptacles shall be sufficient in numbers to serve the desired space in a practical manner, but not less than three (3) duplex receptacles per sleeping room and living areas, such as dens.
- d. These Code requirements are not required to be added to existing serviceable electrical systems:
  - (1) Exterior plugs for residences.

Where there is a question regarding the safety of any installed electrical system in a building which is being rehabilitated, the Electrical Inspector may require that the owner obtain the services of a licensed Master Electrician to completely examine and test the system and report on its safety. When systems are found to be unsafe, they must be replaced in accordance with the requirements of the National Electrical Code, as adopted by the City of Abilene.



## Definitions

**103. General.** For the purpose of these provisions, certain terms, phrases, words and their derivatives, shall be construed as specified in this section. Where terms are not defined, they shall have their ordinarily accepted meanings, within the context with which they are used. The most current version of *Webster's Third New International Dictionary of the English Language, Unabridged*, shall be considered as providing ordinarily accepted meanings. Words used in the singular include the plural, and the plural the singular. Words used in the masculine gender include the feminine, and the feminine the masculine.

**APPROVED**, as to materials, equipment, and method of construction, refers to approval by the Building Official, as the result of investigations and tests conducted by the Building Official, or by reason of accepted principles or tests by recognized authorities, technical or scientific organizations.

**APPROVED AGENCY** is an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when the agency has been approved by the Building Official.

**BUILDING CODE** is the International Building Code promulgated by the International Code Council, as adopted by this jurisdiction.

**BUILDING OFFICIAL** is the officer charged with the administration and enforcement of this code, or a duly authorized representative, and is the authority having jurisdiction for this code.

**ELECTRICAL INSPECTOR** shall be the person providing expertise for the Building Official in the area of electrical regulations, and is a duly authorized representative and authority having jurisdiction for this code, under the supervision of the Building Official.

**CODE ENFORCEMENT AGENCY** is the department, division, or agency of this jurisdiction charged with the function of code enforcement and shall be under the administration and operational control of the Building Official.

**ELECTRICAL CODE** is the National Electrical Code promulgated by the National Fire Protection Association, and further amendments, as adopted by this jurisdiction.

**ELECTRICAL WORK** is any work related to, or involving the furnishing of labor, equipment, appliances or materials, or the performance of any operation in connection with electrical installations. It includes, but is not limited to, the following:

1. Power and lighting systems, secondary services, distribution panels, lighting panels, conduits, junction boxes, pull boxes, outlets, feeders, sub-feeders, wiring devices, service fittings, lighting fixtures, lamps, etc.

2. All power and control wiring, and any other electrical installations incidental to any equipment furnished by any other contractors, owners, or their agents.

**FIREWALL** shall be the same as is referenced in the Building Code.

**INSTALLATION** is any electrical work of any nature performed on, in, or near any premises.

**LEGAL ENTITY** Legal Entity shall be an electrical business, meeting the requirements for a licensed Master Electrician.

**LISTED and LISTING** are terms referring to equipment and materials, which are shown in a list published by an approved testing agency, qualified and equipped for experimental testing productions, and which listing states that the material or equipment complies with accepted national standards which are approved, or standards which have been evaluated for conformity with approved standards.

**MULTIPLE OCCUPANCY BUILDING** is a building having more than one tenant and may be of single or mixed use groups, as classified by the Building Code.

**OCCUPANCY** is the purpose for which a building, or part thereof, is used or intended to be used.

*{Add a new definition as follows:}*

**On-Site Supervision**--Exercise of supervision of electrical work or electrical sign work by a licensed individual other than an electrical apprentice. Continuous supervision of an electrical apprentice is not required, though the on-site supervising licensee shall be on-site at all times when an electrical apprentice is performing electrical work or electrical sign work. The on-site supervising licensee is responsible for review and inspection of the electrical apprentice's work to ensure compliance with any applicable codes or standards.

### **Conflicting Provisions**

104. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

### **Alternate Materials and Methods of Construction**

105. The provisions of this code are not intended to prevent the use of any material or method of construction not specifically prescribed by this code, provided any alternate has been approved and its use authorized by the Building Official.

The Building Official may approve any alternate, provided that the proposed design is satisfactory and complies with the provisions of this code, and that the material, method or work offered is for the purpose intended, and is at least the equivalent of that prescribed in this code in suitability, strength, effectiveness, fire resistance, durability and safety.

The Building Official shall require that sufficient evidence or proof be submitted to substantiate any claims, regarding the use of alternates. The details of an action granting approval of an alternate shall be recorded and entered in the files of the code enforcement agency.

### **Modifications**

106. Whenever there are practical difficulties involved in carrying out the provisions of this code, the Building Official may grant modifications for individual cases, provided that a special individual reason makes the strict letter of this code impractical, and the modification is in conformity with the intent and purpose of this code, and that such modification does not lessen health, life, and fire safety requirements. The detail of actions granting modifications shall be recorded and entered in the files of the code enforcement agency.

### **Tests**

107. Whenever there is insufficient evidence of compliance with any of the provisions of this code or evidence that materials or construction do not conform to the requirements of this code, the Building Official may require tests as evidence of compliance to be made at no expense to this jurisdiction.

Test methods shall be as specified by this code or by other recognized test standards. In the absence of recognized and accepted test methods for the proposed alternate, the Building Official shall determine test procedures.

All tests shall be made by an approved agency. Reports of such tests shall be retained by the Building Official for the period required for the retention of public records.

## **CHAPTER 2 ORGANIZATION AND ENFORCEMENT**

### **Powers and Duties of Building Official**

201. (a) **General.** The Building Official is hereby authorized and directed to enforce all the provisions of this code. For such purposes, the Building Official shall have the powers of a law enforcement officer.

**(b) Deputies.** In accordance with prescribed procedures, and with the approval of the appointing authority, the Building Official may appoint electrical inspectors and other related technical officers and inspectors and other employees as shall be authorized from time to time.

The Electrical Inspector shall be a competent person of good moral character; he shall have had at least a minimum of four (4) years experience as a Journeyman Electrician; he shall have adequate knowledge of current and approved methods and practices relating to electrical installations; and he shall have passed the examination for Journeyman Electricians.

The Electrical Inspector shall, when in the performance of their duties, carry a badge to be furnished by the City.

The Electrical Inspector shall not engage in the occupation of electrical wiring, nor have any financial or other interest in any electrical business doing electrical wiring, within the jurisdiction.

**(c) Right of Entry.** Whenever necessary to make an inspection to enforce the provisions of this code, or whenever the Building Official or an authorized representative has reasonable cause to believe that there exists in a building or upon a premises a condition or code violation which makes such building or premises unsafe, dangerous or hazardous, the Building Official, or an authorized representative, may enter such building or premises at all reasonable times to inspect the same, or to perform any duty imposed upon the Building Official by such codes, provided that if such building or premises be occupied, the Building Official shall first present proper credentials and request entry. If such building or premise is unoccupied, the Building Official or authorized representative, shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If entry is refused, the Building Official, or an authorized representative, shall have recourse to every remedy provided by law to secure entry.

When the Building Official, or an authorized representative, shall have first obtained a proper inspection warrant, or other remedy provided by law, to secure entry, an owner or occupant or other persons having charge, care or control of the building or premises, shall not fail or neglect, after proper request is made as herein provided, to promptly permit entry herein by the Building Official, or authorized representative, for the purpose of inspection and examination, pursuant to this code.

**(d) Stop Orders.** Whenever work is being done contrary to the provisions of this code, the Electric Inspector may order the work stopped, by notice in writing served on persons engaged in doing the work to be done; and such persons shall forthwith stop such work until authorized by the Electrical Inspector to proceed with the work.

**(e) Authority to Disconnect Utilities in Emergencies.** The Building Official, or authorized representative, shall have the authority to disconnect electric power or energy service supplied to the building, structure, or building service equipment therein regulated by this code in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall, whenever possible, notify the serving utility, the owner and occupant of the building, structure or electrical system, or

equipment, of the decision to disconnect prior to taking such action, and shall notify the serving utility, owner and occupant of the building, structure or building service equipment, in writing, of the disconnection immediately thereafter.

**(f) Authority to Condemn Electrical System and Equipment.** Whenever the Electrical Inspector ascertains that an electrical system or equipment regulated in this code has become hazardous to life, health or property, the Electrical Inspector shall order, in writing, that such electrical system or equipment either be removed or restored to a safe condition, whichever is appropriate. The written notice itself shall fix a time limit for compliance with such order. Persons shall not use or maintain defective electrical system or equipment after receiving notice.

When equipment or an installation is to be disconnected, a written notice of such disconnection and causes therefor shall be given, within twenty-four (24) hours of the order to disconnect to the serving utility, the owner and occupants of the building, structure or premises.

When an electrical system or equipment is maintained in violation of this code and in violation of a notice issued pursuant to the provisions of this section, the Electrical Inspector shall institute appropriate action to prevent, restrain, correct, or abate the violation.

**(g) Connection after Order to Disconnect.** Persons shall not make connections from an energy or power supply, nor supply power to an electrical system or equipment, which has been disconnected or ordered to be disconnected, by the Electrical Inspector, or the use of which has been ordered to be discontinued by the Electrical Inspector, until the Electrical Inspector authorizes the reconnection and use of the electrical system or equipment.

**(h) Liability.** The Building Official, or an authorized representative charged with the enforcement of this code, acting in good faith and without malice in the discharge of duties, shall not hereby render the Building Official, or authorized representative, personally liable for any damage that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of duties. A suit brought against the Building Official or employee because of an act or omission performed by the Building Official in the enforcement of provisions of this code shall be defended by legal counsel provided by this jurisdiction until final termination of such proceedings.

This code shall not be construed to relieve from or lessen the responsibility of a person owning, operating or controlling any building, structure or building service equipment therein, for any damages to persons or property caused by defects, nor shall the code enforcement agency be held as assuming such liability by reason of the inspections authorized by this code or approvals issued under this code.

**(i) Cooperation of Other Officials and Officers.** The Building Official may request, and shall receive, so far as is required in the discharge of duties, the assistance and cooperation of other officials of this jurisdiction.

## **Unsafe Electrical Systems or Equipment**

**202.** Electrical systems or equipment regulated by this code which are unsafe, or which constitute a fire hazard, or are otherwise dangerous to human life are, for the purpose of this section, unsafe. Use of electrical systems or equipment regulated by this code constituting a hazard to safety, health, or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage, or abandonment is, for the purpose of this section, an unsafe use.

Unsafe electrical systems or equipment are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal, in accordance with the procedures set forth in the Uniform Code for the Abatement of Dangerous Buildings or an alternate procedure as may be adopted by this jurisdiction. As an alternative, the Building Official, or other employee, or Official of this jurisdiction as designated by the governing body, may institute other appropriate action to prevent, restrain, correct, or abate the violation.

## **Board of Appeals**

**203. General.** The Board of Appeals may hear appeals of any decision of the building official or his/her representatives regarding the electrical, mechanical, plumbing, or swimming pool ordinance. The board does not have the authority to waive code requirements, but may consider alternate materials and methods for the purpose of complying with the provisions of this code. The board shall be as is established in the Municipal Code, Article V, Division 3, Sections 8-391 through 8-407 for the Mechanical, Plumbing, Electrical and Swimming Pool Board of Appeals.

## **Violations**

**204. Unlawful Acts.** It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use or maintain an electrical system or equipment or cause or permit the same to be done in violation of this code.

**204.1 Notice of Violation.** The building official, or his/her representative, is authorized to serve a notice of violation or order on the person responsible for an unlawful act. Such order shall direct the discontinuance of the illegal action and the abatement of the violation.

**204.2 Prosecution of Violation.** If the notice of violation is not complied with promptly, the building official, or his/her representative, is authorized to issue citations, or to request the legal counsel of the jurisdiction to institute the appropriate proceeding

at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful act.

**204.3 Violation Penalties.** A person who violates a provision of this code or fails to comply with any of the requirements thereof or who performs electrical work in violation of this Code shall be subject to penalties as prescribed by law. Any such violation shall be a Class C misdemeanor and upon conviction thereof, shall be punishable by a fine, not to exceed \$500. Each day a violation of any of the provisions of this Code is committed, or each day any such violation continues, shall constitute a separate offense and shall be subject to prosecution as stated above.

### **CHAPTER 3 PERMITS AND INSPECTIONS**

#### **Permits**

**301. (a) Permits Required.** Except as specified in Subsection (b) of this section, no electrical system regulated by this code shall be installed, altered, repaired, replaced or remodeled, unless a separate electrical permit for each building or structure has first been obtained from the Building Official.

**(b) Exempt Work.** An electrical permit shall not be required for the following:

1. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by this code.
2. Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.
3. Temporary decorative lighting.
4. Repair or replacement of current-carrying parts of any switch, contactor or control device.
5. Reinstallation of attachment plug receptacles, but not the outlets therefor.
6. Repair or replacement of any overcurrent device of the required capacity, in the same location.

7. Repair or replacement of electrodes or transformers of the same size and capacity for signs or gas tube systems.
8. Taping joints.
9. Removal of electrical wiring.
10. Temporary wiring for experimental purposes in suitable experimental laboratories.
11. The wiring for temporary theater, motion picture or television stage sets.
12. Low-energy power, control and signal circuits of Classes II and III, as defined in this code.
13. A permit shall not be required for the installation, alteration or repair of electrical wiring, apparatus, or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility and placed upon easements of such company.
14. Reference 90-2 (b) (5). Installations, including associated lighting, under the exclusive control of electric utilities for the purpose of communications, metering, generation, control, transformation, transmission, or distribution of electric energy. Such installations shall be located in buildings used exclusively by utilities for such purposes; outdoors on property owned or leased by the utility; on or along public highways, streets, roads, etc.; or outdoors on private property by established rights such as easements. Utility companies shall provide documentation of easements, prior to commencing work for outdoor lighting. At any time a lighting system is no longer under the control of the utility company, the system shall be modified to meet the National Electrical Code. **EXCEPTION:** Single pole guard lights do not require written documentation to be filed with the City of Abilene Building Inspection Department.
15. A permit shall not be required for the installation or repair of electrical wiring, apparatus, or equipment, pertaining to exterior, underground airport lighting and airport signs.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this code, or any other law, or ordinances of this jurisdiction.



## **Permit Information**

**302. (a) Application.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the code enforcement agency for that purpose. Every such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done, by legal description, street address or similar description, which will readily identify and definitely locate the proposed building or work.
3. Indicate the use or occupancy for which the proposed work is intended.
4. Be accompanied by plans, diagrams, computations and specifications and other data as required in Subsection (b) of this section.
5. Be signed by permittee, or authorized agent.
6. Give such other data and information as may be required by the Electrical Inspector

**(b) Exception:** The Electrical Inspector may waive the submission of plans, calculations, etc., if the Electrical Inspector finds that the nature of the work applied for is such that reviewing of plans is not necessary to obtain compliance with this code.

**(c) Information on Plans and Specifications.** Plans and specifications shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations.

Plans for buildings more than two stories in height of other than Groups R, Division 3 and U Occupancies shall indicate how required structural and fire-resistive integrity will be maintained where a penetration will be made for electrical and communication conduits, pipes and similar systems.

## **Permits Issuance**

**303. (a) Issuance.** The application, plans and specifications, and other data, filed by an applicant for permit, shall be reviewed by the Electrical Inspector. Such plans may be reviewed by other departments of this jurisdiction to verify compliance with any applicable laws under their jurisdiction. If the Building Official finds that the work described in an application for a permit and the plans, specifications and other data filed therewith conform to the requirements of this code and other pertinent laws and

ordinances, and that the fees specified in Section 304 have been paid, the Electrical Inspector shall issue a permit therefor to the applicant.

When the Building Official issues a permit, the plans and specifications shall be endorsed in writing or stamped "REVIEWED". Such approved plans and specifications shall not be changed, modified or altered without authorizations from the Electrical Inspector, and all work regulated by this code shall be done in accordance with the approved plans.

The Building Official may issue a permit for the construction of part of an electrical system before the entire plans and specifications for the whole system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this code. The holders of such permits shall proceed at their own risk, without assurance that the permit for the entire building, structure or building service will be granted.

**(b) Retention of Plans.** One set of approved plans, specifications and computations shall be retained by the Building Official until final approval of the work covered therein. One set of approved plans and specifications shall be returned to the applicant and shall be kept on the site of the building or work at all time during which the work authorized thereby is in progress.

**(c) Validity of Permit.** The issuance of a permit or approval of plans and specifications shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code, or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

The issuance of a permit based upon plans, specifications and other data shall not prevent the Electrical Inspector from thereafter requiring the correction of errors in said plans, specifications and other data, or from preventing building operations being carried on thereunder when in violation of these codes or any other ordinances of this jurisdiction.

**(d) Expiration.** Every permit issued by the Building Official under the provisions of this code shall expire by limitation and become null and void, if the building or work authorized by such permit is not commenced within one hundred eighty days (180) days. Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefor shall be one half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on a permit after expiration exceeds one year, the permittee shall pay a new full permit fee.

A permittee holding an unexpired permit may apply for an extension of the time within which work may be commenced under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee for a period not exceeding one hundred eighty (180) days upon written request by the

permittee showing that circumstances beyond the control of the permittee have prevented action from being taken.

**(e) Suspension or Revocation.** The Electrical Inspector may, in writing, suspend or revoke a permit issued under the provisions of this code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any ordinance or regulation of the jurisdiction.

## **Fees**

### **304 (a) Permit Fees.**

Permit fees shall be set by the City Council by resolution. Appendix A references approved fees at the time of adoption of this code. Fees published in this document are subject to change by Council action.

### **(b) Investigation Fees: Work Without a Permit.**

- 1. Investigation.** Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.
- 2. Fee.** An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee that would be required by this code if a permit were to be issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of either this code nor from any penalty prescribed by law. Further work performed by the same contractor, without permits, will result in penalty and investigation fee of ten (10) times the amount of the permit fee required by this code, if a permit were to be issued. At the end of twelve (12) months from issuance of the ten (10) times fee, a contractor with no further violations shall be determined to start without previous penalties.

### **(c) Fee Refunds.**

- 1.** The Building Official may authorize the refunding of any fee paid hereunder, which was erroneously paid or collected.
- 2.** The Building Official may authorize the refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

3. The Building Official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than one hundred eighty (180) days after the date of fee payment.

**(d) Permit by Charge Account.**

Permits may be obtained by charge account with the following restrictions:

1. The applicant shall make a deposit of \$150.00 with the City of Abilene.
2. The deposit is security for the account and shall not be applied to the account of the applicant.
3. Every applicant shall be billed each month for the total balance of his/her account and a written list of permits shall be identified on the invoice.
4. All accounts shall be payable within 10 days after the billing date; any account not paid within 10 days, and upon notice from the Accounting Department to the Building Inspection Department, shall not be eligible for further issuance of permits. Failure to pay said account shall result in the applicant's deposit being forfeited to the City of Abilene. Charging privileges are therefore revoked, and a new deposit along with payment of all bills due to the City of Abilene must be paid before any additional charges are permitted.

**Inspections**

**305. (a) General.** All electrical systems and equipment for which a permit is required by this code shall be subject to inspection by the Electrical Inspector, and the electrical system shall remain accessible and exposed for inspection purposes until approved by the Electrical Inspector.

It shall be the duty of the permit applicant to cause the electrical system to remain accessible and exposed for inspection purposes. Neither the Electrical Inspector nor the jurisdiction shall be liable for the expense entailed in the removal or replacement of any material required to allow an inspection. When the installation of an electrical system and equipment is complete, an additional and final inspection shall be made.

Electrical systems and equipment regulated by this code shall not be connected to the energy source until authorized by the Electrical Inspector.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel provisions of this code or of other ordinances of the jurisdiction shall not be valid.

**(b) Inspection Requests.** It shall be the duty of the person doing the work authorized by a permit to notify the Electrical Inspector that such work is ready for inspection. The Electrical Inspector may require that every request for inspection be filed at least one working day before such inspection is desired. Such request may be in writing or by telephone at the option of the Electrical Inspector.

It shall be the duty of the person requesting inspections required by this code to provide access to and means for inspection of such work.

**(c) Operation of Electrical Equipment.** The requirements of this section shall not be construed to prohibit the operation of any electrical system or equipment installed to replace existing equipment. The request for inspection of such equipment must have been filed with the Electrical Inspector not more than forty eight (48) hours after such replacement work is completed and before any portion of such electrical system is concealed by any permanent portion of the building.

**(d) Other Inspections.** In addition to the called inspections required by this code, the Electrical Inspector may make or require other inspections of any work to ascertain compliance with the provisions of this code and other laws, which are enforced by the code enforcement agency.

**(e) Reinspections.** A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This provision is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the approved plans are not readily available to the Inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Electrical Inspector.

To obtain a reinspection, the applicant shall file an application therefore in writing, or by phone, and pay the reinspection fee in accordance with the fees adopted by the City Council.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

### **Connection Approval**

**306 (a) Energy Connections.** An electrical system or equipment regulated by this code for which a permit is required shall not be connected to a source of energy until approved by the Electrical Inspector.

**(b) Temporary Connections.** The Electrical Inspector may authorize the temporary connection of an electrical system or equipment to the source of energy or power for the purpose of testing equipment or for use under a temporary certificate of occupancy. Permits for temporary service shall be issued to the electrical contractor, and shall be limited to ninety (90) days. The owner, or legal representative of the owner, shall acknowledge temporary service restrictions in writing on the building permit application, or must file an Affidavit for temporary service utility release, with the office of the Electrical Inspector, prior to the electrical contractor requesting a temporary service permit and inspection.

## **CHAPTER 4 LICENSE REQUIREMENTS**

### **License**

401. **(a) Electrical License Required.** All persons who engage in or work at the actual installation, alteration, repair, renovation and/or maintenance of all electrical wiring systems and the appurtenances, apparatus, or equipment used in connection with the use of electrical energy in, on, outside, or attached to a building, residence, structure, property, or premises shall possess the appropriate license in accordance with the State of Texas Electrical Safety and Licensing Act, Title 8, Occupations Code, Chapter 1305.

**(b) Homestead Exemption.** A homeowner performing electrical work in accordance with Section 1305.003 (6) Exemptions shall additionally comply with the following:

1. The owner shall file with the Electrical Inspector approved plans and specifications, shall satisfy the Electrical Inspector as to his ability to install electrical wiring, shall apply for and secure a permit, shall pay the required fees, shall do work in accordance with this chapter and shall request the required inspections and obtain a certificate of approval.
2. Installation by an owner under this subsection shall be by himself, for himself on his homestead premises.
3. No homeowner shall be issued a permit under the provisions of this subsection more frequently than once each two (2) calendar years.

*{Add a new article as follows:}*

**401.1 On-site Supervision of Apprentices.** Apprentices shall not perform work unless they are under on-site supervision as defined in Article 80, Section 103 of this code.

**402. Bond Requirements.** Any person desiring to engage in the business of an electrical contractor, shall first file with the Building Official of the city, a surety bond in the penal sum of five thousand dollars (\$5,000.00) to be approved by the City Manager, payable to the City of Abilene, and conditioned on a faithful performance of all of the provisions and regulations of the electrical code, this chapter, and all other ordinances of the city, and the surety on such bond shall be a company authorized to transact business in the state.

**403. Contractor's Registration Required.** All contractors shall first file with the code official of the City of Abilene, as a registered contractor, as per Section 8-161 of the Municipal Code, Article IV, Licenses.

**404. Insurance Requirements.** Any person desiring to engage in the business of an electrical contractor, shall first file with the Building Official of the City, a certificate of insurance providing for commercial general liability insurance, with a coverage amount of not less than \$300,000.00 for all claims arising in any one year.

*The following provisions are amendments to the 2014 National Electric Code:*

**CHAPTER 1  
GENERAL**

**ARTICLE 110  
Requirements for Electrical Installations**

**110.5 Conductors.** *{Amend to add two new sub- articles as follows:}*

**110.5 (A) Conductors.** The use of aluminum conductors is prohibited except where specifically addressed in the following articles as amended by this pamphlet:  
**225.6 (C), 230.23 (B), 230.31 (B), 310.10.**

**Exception :** Aluminum conductors installed in accordance with Article 225.6 (A) 1 and 2.

**110.5 (B) Prohibited Location.**

The use of aluminum conductors inside or under a structure is prohibited.

**Exception :** Aluminum service conductors installed in accordance with Article 230.23 (B) and 230.31 (B) as amended by this pamphlet.

**CHAPTER 2  
WIRING AND PROTECTION**

**ARTICLE 210  
Branch Circuits**

**210.11 Branch Circuits Required.**

**(C) Dwelling Units.**

**(1) Small-Appliance Branch Circuits.** *{Add the following.}*

- (a) The small appliance circuits, as called for in the National Electrical Code, shall contain no more than six (6) outlets per circuit; provided further, the circuit conductor shall not be smaller than number 12 AWG. Loads shall be balanced.



**ARTICLE 220**  
**Branch-Circuit, Feeder, and Service Calculations**

**220.14 Other Loads – All Occupancies**

**(J) Dwelling Occupancies**

*{Add the following.}*

(4) General purpose circuits for residential wiring shall contain no more than six (6) outlets per circuit.

**Exception:** Where central heat and air are existing, or are being added, this may be increased to no more than ten (10) outlets per circuit on a fifteen (15) amp breaker, or fourteen (14) outlets per circuit on a twenty (20) amp breaker.

**ARTICLE 225**  
**Outside Branch Circuit and Feeders**

**225.6 Conductor Size and Support.** *{Amend to add a new sub-article as follows:}*

**(C) Aluminum Underground Conductors.** For 1000 volts, nominal, or less, aluminum conductors installed underground shall not be smaller than 6 AWG aluminum.

**ARTICLE 230**

**Services**

**230.23 (B) Minimum Size.** *{Amend to read as follows:}*

The conductors shall not be smaller than 8 AWG copper or three ought (3/0) aluminum or copper-clad aluminum.

**230.28 (A) Strength.** *{Add the following sentence at the end of paragraph.}*

The riser shall be a minimum of two (2) inch rigid steel conduit or IMC.

**230.31 (B) Minimum Size.** *{Amend to read as follows:}*

The conductors shall not be smaller than 8 AWG copper or three ought (3/0) aluminum or copper-clad aluminum.

**CHAPTER 3  
WIRING METHODS**

**ARTICLE 310  
II. Installation**

**310.10 Uses Permitted.** *{Amend to add a new exception as follows:}*

**Exception:** The use of aluminum conductors is prohibited except where specifically addressed in the following articles as amended by this pamphlet:

**225.6 (C), 230.23 (B), 230.31 (B), 310.10.**

**310.15 (B) Tables.** *{Amend to add a new paragraph as follows:}*

The use of aluminum conductors is prohibited except where specifically addressed in the following articles as amended by this pamphlet:

**225.6 (C), 230.23 (B), 230.31 (B), 310.10.**

**ARTICLE 334  
Nonmetallic-Sheathed Cable:  
Types NM, NMC, and NMS**

**334.12 (A) Uses Not Permitted.** *{Add the following.}*

11. In other than residential structures, as defined in the City of Abilene Building Code, that are less than 5,000 square feet that are not constructed of convention wood frame construction.
12. In other than residential structures, as defined in the City of Abilene Building Code, 5,000 square feet or greater or when a addition to an existing structure increases the total building to 5,000 square feet or greater.
13. In other than residential structures, as defined in the City of Abilene Building Code, with a wiring system greater than 250 volts to ground and/or greater than a 400 Amp Service.

**APPENDIX A**

**CITY OF ABILENE**

**ELECTRICAL PERMIT FEES**

Minimum Permit Fee	50.00
Reinspection Fee	75.00
Electrical Device	.30
Lighting Fixture (includes opening)	.55
Fixed or Stationary Appliances	5.00
Exhaust or Ventilation Fan (fractional motor)	2.00
Gas Pump/Dispenser	5.00
Electric Welder	2.00
Motors Fractional up to 3 HP	1.50
Motors Fractional 3 to 5 HP	3.00
Motors Above 5 HP	5.00
Condenser Units/Chillers 3 Ton or less	5.00
Condenser Units/Chillers 3 to 5 Ton	6.00
Condenser Units/Chillers greater than 5 Ton	7.00
Lighted Signs - Pole Mounted	20.00
Lighted Signs - Exterior Building Mounted	5.00
Lighted Signs - Interior	2.50
Electric Heat per kw	.50
Buss Duct per foot	.50
Multi Outlet Assembly - First Circuit	1.00
Multi Outlet Assembly - Additional Circuit	.50
Temporary Power Pole	30.00
Temporary Service	30.00
New Service (per meter)	25.00
Service (Move, Change, Alter)	25.00
Generator	15.00
Elevators, Dumbwaiters	10.00
Area Lighting Poles up to 10' (less fixtures)	2.00
Area Lighting Poles above 10' (less fixtures)	4.00
Residential Permit - New or additions per sq.ft.	.04
Unfinished living space per sq.ft.	.03

**OTHER INSPECTIONS AND FEES**

Inspections outside of normal business hours (Minimum Charge-two hours)	200.00
Special Request Inspections (Minimum Charge-one hour)	100.00
Board of Building Standards and Mechanical, Plumbing, Electrical, and Swimming Pool Board of Appeals request for hearing for alternate methods and materials	100.00
Contractor's Registration (annually, due by December 31 of each year)	65.00
Contractor's Registration Initial Set-up Fee	50.00
Stop Work Order Release Fee	125.00

