

# —Electrical Homeowner's Guide—

*The following is an informational document only.*

## **Can I do my own wiring?**

A homeowner may do his/her own wiring if he/she owns and resides at this single-family residence.

## **Who can get an electrical permit?**

Only the homeowner/resident (**you must own and reside at this residence**) will be allowed to obtain a Homeowner's Electrical Permit. Permits will not be issued to friends or family members.

## **When do I need a permit?**

Permits are required before any alterations are made to existing electrical systems or new construction. You are allowed up to four openings within a year's time without obtaining a permit. If you exceed this amount, a Homeowner's Electrical Permit will be required. A permit is always required if an electrical service panel is installed or an appliance such as furnace, air conditioner, etc., is connected.

## **Active Permit Period.**

Your permit only pertains to the work described on the permit application. Homeowner electrical permits have a life period of two years maximum; after the two-year time period has elapsed, a new permit will be required. In order for the permit to remain active for the duration of the two-year period, a required inspection by a division of Building Services (Building, Plumbing, Mechanical, or Electrical) shall be performed within 180 days of issuance and within each consecutive 180-day time period. It is the permittee's responsibility to make all required corrections and call for reinspection within a 30-day time period. No permit shall be canceled, abandoned, or have occupancy granted with outstanding violations.

## **When and where do I get my permit?**

Permits are issued at the City of Sioux Falls Planning and Building Services Office, City Center, 231 North Dakota Avenue. Office hours are from 8 a.m. to 5 p.m., Monday through Friday, excluding holidays. The phone number is 367-8670. Electrical Inspectors are in the office to answer technical questions from 8 a.m. to 9 a.m. If you are going to remove or install a new electrical service panel, you must call ahead of time to make an appointment with one of our Electrical Inspectors at 367-8250.

## **What is the present code?**

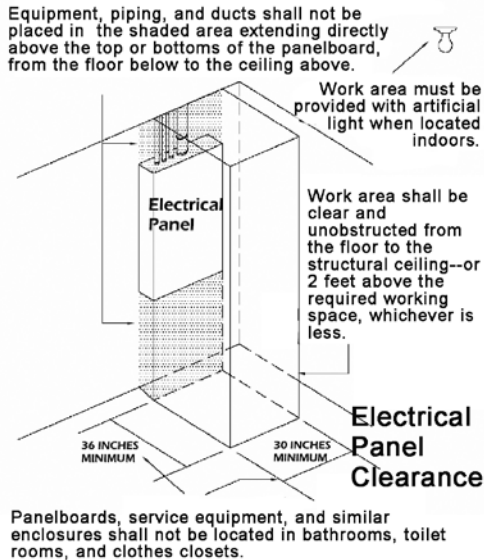
Provisions of this code shall apply to the installation, alteration, repair, relocation, replacement, addition to, use, or maintenance of any electrical system, apparatus, wiring, or equipment for electrical light, heat, power, fire alarms, and associate controls, per the *National Electrical Code*, 2014 Edition, and Section 55.034 of the Code of Ordinances of Sioux Falls, SD.

## **Do I have to do the wiring, or can my friend or family member do it for me?**

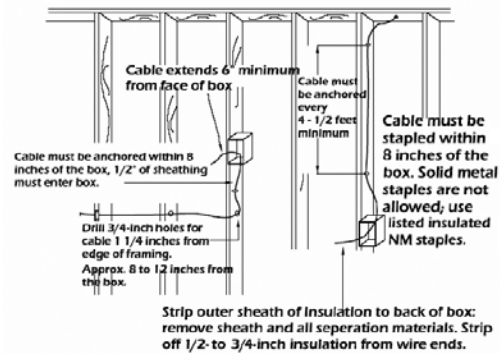
The person who secures the permit is the only party allowed to do the wiring. Any person who receives monetary compensation for electrical work must be employed by an electrical contractor licensed in the city of Sioux Falls and must be doing work for said electrical contractor. In simpler terms, the work must be run through the electrical contractor's business and he may not do the work on the side.

## **What if I have already done my wiring without any inspections?**

Work done without permits is always a problem for both the owner and the inspectors. You will be required to remove finishes so that the inspector can complete their inspections. You will also be required to correct any code violations and request a reinspection which after being completed the wiring can be covered.



## How To Install New Wiring In Walls



Remember, *after* all electrical wiring has been installed, and *before* any interior walls are covered with insulation, sheetrock, lath, paneling, or other material, or any devices are installed (switches, outlets, lights, etc.), a rough-in inspection is required. After the inspection, the inspector will affix a tag stating that the rough-in work has been inspected and accepted and may be covered or he will issue an inspection notice citing specific corrections that are required.

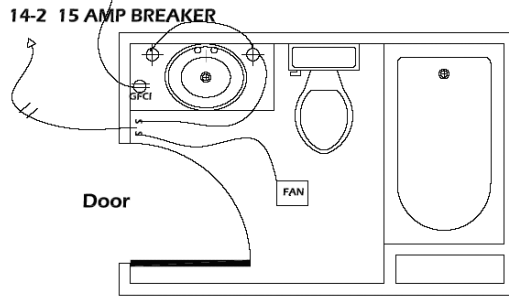
## New Electrical Service Minimum Standard

When adding a new service entrance **with increased amperage**, the existing electrical system shall, at a minimum, comply with the following:

- A. **Kitchens.** Each kitchen shall have a minimum of one 20-ampere circuit serving a countertop receptacle and a grounded receptacle serving a refrigerator.
- B. **Overcurrent device location.** In multifamily dwellings, each occupant shall have access to his or her branch circuit overcurrent devices without going outdoors or through another occupancy.
- C. **Habitable areas.** All habitable areas, other than closets, kitchens, basements, garages, hallways, laundry areas, utility areas, storage areas, and bathrooms, shall have minimum of two duplex receptacle outlets, or one duplex receptacle outlet and one ceiling or wall-type lighting outlet.
- D. **Minimum lighting outlets.** At least one lighting fixture shall be provided in every habitable room, bathroom, hallway, stairway, attached garage and detached garage with electrical power, in utility rooms, and basements where the spaces are used for storage or contain equipment requiring service and to illuminate outdoor entrances and exits.
- E. **Ground fault circuit interrupters.** Ground fault circuit interrupter protection shall be provided for all receptacles in bathrooms, laundry, above kitchen counters, attached and detached garages provided with power, at readily accessible receptacles within 6 feet of sinks, unfinished basements, and at outdoor locations. The exceptions of the *National Electrical Code* §§ 210.8(A)3 and 5 shall apply.
- F. **Laundries.** Each laundry shall be provided with at least one individual branch 20-ampere circuit.
- G. **Heat sources.** Any heat source shall be provided with an individual branch circuit.
- H. **Exposed wiring methods.** All exposed wiring methods shall be installed in accordance with the applicable *National Electrical Code* article.
- I. **Bathrooms.** Each bathroom shall have one receptacle outlet located within three feet of the basin. Any new bathroom receptacle outlet shall have ground fault circuit interrupter protection.

## BATHROOM RECEPTACLES AND OUTLETS

12-2 CABLE 20 AMP BREAKER



At least one wall receptacle outlet shall be installed in bathrooms and such outlets shall be located within 36 inches of the outside edge of each lavatory basin. The receptacle outlet shall be located on a wall that is adjacent to the lavatory basin. At least one 20-ampere branch circuit is required to supply bathroom receptacle outlets. Such circuits shall have no other outlets. However, other equipment within the same bathroom may be supplied by the 20-amp receptacle circuit where the circuit supplies a single bathroom only. Receptacles installed in bathrooms shall have ground-fault-circuit interrupter protection for personnel. A receptacle shall not be installed within a bathtub or shower space.

## Single-Pole Switch



A single-pole switch controls a light or receptacle from one location. It has two brass-colored terminals and "on" and "off" markings on the handle.

## Three-Way Switch



Three-way switches, used in pairs to control a light or receptacle from two locations, have three terminals: one black or copper-colored and two brass or silver-colored. There are no "on" and "off" markings.

## Four-Way Switch

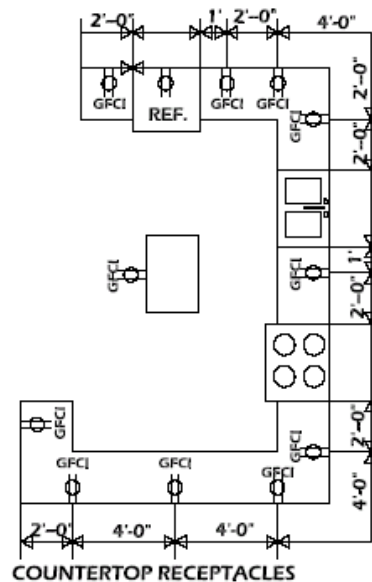
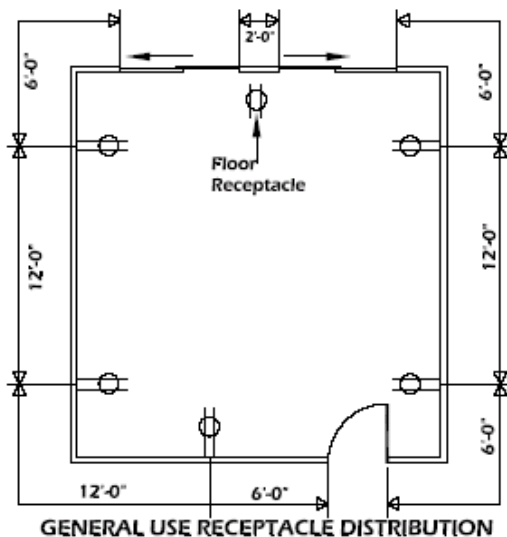


A four-way switch works with three-way switches to control a light or receptacle from three or more locations. It has four brass-colored terminals and no "on" and "off" markings.

*Single-Pole Switch.* Neutral must be present.

*Three-Way Switch:* Neutral must be present in at least one location.

## Location of Kitchen Receptacles and Outlets



Pictured above are illustrations of kitchen receptacle locations.

**Convenience Receptacle Distribution.** In every kitchen, family room, dining room, living room, parlor, library, den, sunroom, bedroom, recreation room, or similar room or area of dwelling units, receptacles shall be installed per the following:

**Receptacle Outlet Location.** Receptacle outlets shall be located not more than 20 inches above the countertop. Receptacle outlets shall not be installed in a face-up position in the work surfaces or countertops. Receptacle outlets rendered not readily accessible by appliances fastened in place or appliances occupying dedicated space shall not be considered as these required outlets.

**Kitchen Receptacles.** All 125-volt, single-phase, 15-and 20-ampere receptacles that serve countertop surfaces shall have ground fault circuit interrupter protection for personnel.

**Wall Counter Space.** A receptacle outlet shall be installed at each wall counter space 12 inches or wider. Receptacle outlets shall be installed so that no point along the wall line is more than 24 inches, measured horizontally from a receptacle outlet in that space.

**Island Counter Spaces.** At least one receptacle outlet shall be installed at each island counter space with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater.

**Peninsula Counter Space.** At least one receptacle outlet shall be installed at each peninsula counter space with a long dimension of 24 inches or greater and a short dimension of 12 inches or greater. A peninsula countertop is measured from the connecting edge.

**Separate Spaces.** Countertop spaces separated by range tops, refrigerators, or sinks shall be considered as separate countertop spaces.

**Small Appliance Receptacles.** In the kitchen, pantry, breakfast room, dining room, or similar area of a dwelling unit, the two or more 20-ampere small appliance branch circuits shall serve all receptacle outlets and those receptacle outlets provided for refrigeration appliances.

**Other Outlets Prohibited.** The two or more small appliance branch circuits above shall serve no other outlets other than:

- A receptacle installed solely for the electrical supply to and support of an electric clock in any of the rooms.
- Receptacles installed to provide power for supplemental equipment and lighting on gas-fired ranges, ovens, and counter-mounted cooking units.

**Limitations.** Receptacles installed in a kitchen to serve countertop surfaces shall be supplied by not less than two small appliance branch circuits, either or both of which shall also be permitted to supply receptacle outlets in the same kitchen and dining rooms. Additional small appliance branch circuits shall be permitted to supply receptacle outlets in the kitchen and other rooms. A small appliance branch circuit shall not serve more than one kitchen.

**Flexible Cords and Extension Cords.** Where permitted, flexible cords shall be used only for the connection of appliances where the fastening means and mechanical connections of such appliances are designed to permit ready removal for maintenance, repair, or frequent interchange, and the appliance is listed for flexible cord connection. Flexible cords shall not be installed as a substitute for the fixed wiring of a structure; shall not be run through holes in walls, ceilings, or floors; shall not be concealed behind building walls, ceilings, or floors; and shall not be installed in raceways.

### Light Fixture Installation

**Outlet Box Covers.** In a completed installation, each outlet box shall be provided with a cover except where covered by means of a luminaire canopy, lamp holder, or device with a faceplate.

- **Luminaire.** A luminaire is a complete lighting unit consisting of a lamp (or lamps) together with the parts designed to distribute the light, to position and protect the lamps (and ballasts where applicable), and to connect the lamps to the power supply.

**Combustible Material at Outlet Boxes.** Combustible wall or ceiling finish exposed between the inside edge of a luminaire canopy or pan, and the outlet box to which the luminaire connects, shall be covered with a noncombustible material.

**Access.** Luminaires shall be installed so that the connections between the luminaire conductors and the circuit conductors can be accessed without requiring the disconnection of any part of the wiring.

**Supports.** Luminaires and lamp holders shall be securely supported. A luminaire that weighs more than 6 pounds or exceeds 16 inches in any dimension shall not be supported by the screw shell of a lamp holder.

**Means of Support.** Outlet boxes or fittings shall be permitted to support luminaires weighing 50 pounds or less. A luminaire that weighs more than 50 pounds shall be supported independently of an outlet box except where the outlet box is listed for the weight to be supported.

**Exposed Ballasts.** Luminaires having exposed ballasts or transformers shall be installed so that such ballasts or transformers are not in contact with combustible material.

**Recessed Luminaire Clearance.** A recessed luminaire that is not identified for contact with insulation shall have all recessed parts spaced at least 0.5 inch from combustible materials. The points of support and the finish trim parts at the opening in the ceiling or wall surface shall be permitted to be in contact with combustible materials. A recessed luminaire that is identified for contact with insulation, Type IC, shall be permitted to be in contact with combustible materials at recessed parts, points of support, and portions passing through the building structure, and at finish trim parts at the opening in the ceiling or wall.

**Recessed Luminaire Installation.** Thermal insulation shall not be installed above a recessed luminaire or within 3 inches of the recessed luminaires enclosure, wiring compartment, or ballast, except where such luminaire is identified for contact with insulation, Type IC.

**Storage or Equipment Spaces.** In attics, under-floor spaces, utility rooms, and basements, at least one lighting outlet must be installed where these spaces are used for storage or contain equipment requiring servicing. Such lighting outlets are to be controlled by a wall switch or shall have an integral switch. At least one point of control must be at the usual point of entry to these spaces. The lighting outlet shall be provided at or near the equipment requiring servicing.

**Wet or Damp Locations.** Luminaires installed in wet or damp locations shall be installed so that water cannot enter or accumulate in wiring compartments, lamp holders, or other electrical parts. All luminaires installed in wet locations shall be marked “**Suitable for Wet Locations.**” All luminaires installed in damp locations shall be marked “**Suitable for Wet Locations**” or “**Suitable for Damp Locations.**”

**Lamp Holders in Wet or Damp Locations.** Lamp holders installed in wet or damp locations shall be of the weatherproof type.

**Bathtub and Shower Areas.** Cord-connected luminaires, hanging luminaires, lighting track, pendants, and ceiling-suspended paddle fans shall not have any parts located within a zone measured 3 feet horizontally and 8 feet vertically from the top of a bathtub rim or shower stall threshold. This zone is all-encompassing and includes the zone directly over the tub or shower.

**Luminaires in Clothes Closets.** Storage spaces shall be defined as a volume bounded by the sides and back closet walls and planes extending from the closet floor vertically to a height of 6 feet, or the highest clothes-hanging rod and parallel to the walls at a horizontal distance of 24 inches from the sides and back of the closet walls respectively, and continuing vertically to the closet ceiling parallel to the walls at a horizontal distance of 12 inches or the width of the shelf, whichever is greater. For a closet that permits access to both sides of a hanging rod, the storage space shall include the volume below the highest rod, extending 12 inches on either side of the rod on a plane horizontal to the floor extending the entire length of the rod.

**Branch Circuits.** *Branch Circuit Definitions.* A branch circuit is the circuit conductors between the circuit breaker protecting the circuit and the outlet.

- **Branch circuit individual.** A branch circuit that supplies only one utilization equipment.
- **Branch circuit appliance.** A branch circuit that supplies energy to one or more outlets to which appliances are to be connected and that has no permanently connected luminaires (lighting fixtures) that are not of an appliance.
- **Branch circuit, general purpose.** A branch circuit that supplies two or more receptacles or outlets for lighting and appliances.

**Branch Circuit Ampere Rating.** Branch circuits shall be rated in accordance with the maximum allowable ampere rating or setting of circuit breaker or fuse. The rating for other than individual branch circuits shall be 15, 20, 30, 40, and 50 amperes. Where conductors of higher ampacity are used, the ampere rating of the circuit breaker shall determine the rating.

**Circuit Breaker Definition.** Is a device designed to open and close a circuit by nonautomatic means and to open the circuit automatically on a predetermined overcurrent without damage to itself when properly applied within its rating.

**Fuse Definition.** Is an overcurrent device, which generally is replaced when an overload or short circuit occurs.

**15- and 20-Ampere Branch Circuits.** A 15- or 20-ampere branch circuit shall be permitted to supply lighting units, or other utilization equipment, or a combination of both. The rating of any one cord- and plug-connected utilization equipment shall not exceed 80 percent of the branch circuit ampere rating. The total rating of utilization equipment fastened in place, other than lighting fixtures, shall not exceed 50 percent of the branch circuit ampere rating where lighting units, cord- and plug-connected utilization equipment not fastened in place, or both, are also supplied.

**30-Ampere Branch Circuits.** A 30-ampere branch circuit shall be permitted to supply fixed utilization equipment. A rating of any one cord- and plug-connected utilization equipment shall not exceed 80 percent of the branch circuit ampere rating.

**Branch Circuits Serving Multiple Loads or Outlets.** General purpose branch circuits shall supply lighting outlets, appliances, equipment or receptacle outlets, and combinations of such. The rating of a fastened-in-place appliance or equipment, where used in combination on the same branch circuit with light fixtures, receptacles, and/or other appliances or equipment not fastened in place, shall not exceed 50 percent of the branch circuit rating. Multi-outlet branch circuits serving lighting or receptacles shall be limited to a maximum branch circuit rating of 20 amperes.

**Branch Circuit Requirement Summary.** The requirements for circuits having two or more outlets or receptacles and are summarized in the following table:

	Circuit Rating		
	15-amp	20-amp	30-amp
Conductors: Minimum size (AWG) circuit conductors.	14	12	10
Maximum overcurrent protection device rating/ampere rating	15	20	30
Outlet devices: Lampholders permitted Receptacles rating (amperes)	Any Type 15 Max.	Any Type 15 or 20	N/A 30
Maximum load (amperes)	15	20	30

- a. These gauges are for copper conductor.
- b. N/A means not allowed.

**Branch Circuits for Heating.** Central heating equipment, other than fixed electric space heating, shall be supplied by an individual branch circuit. Auxiliary equipment, such as pumps, motorized valves, humidifiers, and electrostatic air cleaners directly associated with the central heating equipment, shall not be prohibited from connecting to the same branch circuit as the central heating equipment.

**Kitchen and Dining Area Receptacles.** A minimum of two 20-ampere-rated AFCI/GFCI branch circuits shall be provided to serve receptacles located in the kitchen, pantry, breakfast area, dining area, or similar area of a dwelling. The kitchen countertop receptacles shall be served by a minimum of two 20-ampere-rated branch circuits, either or both of which shall also be permitted to supply other receptacle outlets in the kitchen, pantry, breakfast, and dining area including receptacle outlets for refrigeration appliances.

**Laundry Circuit.** A minimum of one GFCI 20-ampere-rated branch circuit shall be provided to supply the laundry receptacle outlet(s). This circuit shall have no other outlets.

**Bathroom Branch Circuits.** A minimum of one GFCI 20-ampere branch circuit shall be provided to supply the bathroom receptacle outlet(s). Such circuits shall have no other outlets. Where the 20-ampere circuit supplies a single bathroom, outlets with the same bathroom shall be permitted to be supplied.

**Tamper-Resistant/Weather-Resistant Receptacle Requirements.**

Tamper-resistant devices are required for all 15- and 20-amp volt receptacle outlets installed in any dwelling unit and associated structures. In addition to the tamper-resistant requirements, all receptacle outlets installed in wet locations shall also be listed as weather-resistant type.

## **Ground Fault Receptacle Requirements.**

**Bathroom Receptacles.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in bathrooms shall have ground fault circuit interrupter protection for personnel.

**Garage Receptacles.** All 125-volt, single-phase, 15- or 20-ampere receptacles installed in garages and in grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground fault circuit interrupter protection for personnel.

**Outdoor Receptacles.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed outdoors shall have ground fault circuit interrupter protection for personnel and must be listed as weather-resistant type.

**Crawl Space Receptacles.** Where a crawl space is at or below grade level, all 125-volt, single-phase, 15- and 20-ampere receptacles installed in such spaces shall have ground fault circuit interrupter protection for personnel.

**Unfinished Basement Receptacles.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in unfinished basements shall have ground fault circuit interrupter protection for personnel (unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like). The exceptions to this are:

- A receptacle supplying only a permanently installed fire alarm or burglar alarm system.

**Kitchen Receptacles.** All 125-volt, single-phase, 15- and 20-ampere receptacles that serve countertop surfaces shall have ground fault circuit interrupter protection for personnel.

**Bar Sink Receptacles.** All 125-volt, single-phase, 15- and 20-ampere receptacles that serve a countertop surface and are located within 6 feet of the outside edge of a wet bar sink shall have ground fault circuit interrupter protection for personnel. Receptacle outlets shall not be installed in a face-up position in the work surfaces or countertops.

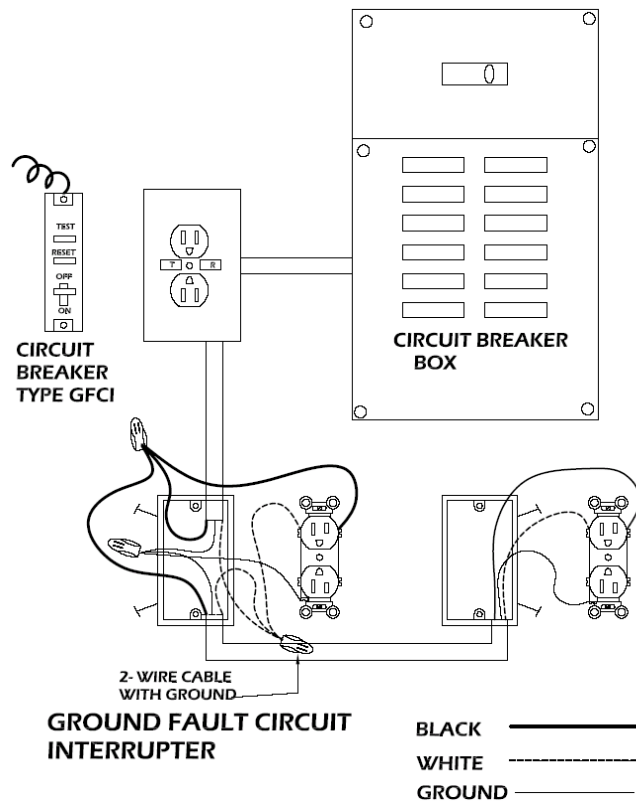
**Electrically Heated Floors.** Ground fault circuit interrupter protection for personnel shall be provided for electrically heated floors in bathrooms and in hydro-massage bathtub, kitchens, spa, and hot tub locations.

**Sinks.** Any accessible outlet within 6 feet of any sinks shall have ground fault circuit interrupter protection for personnel.

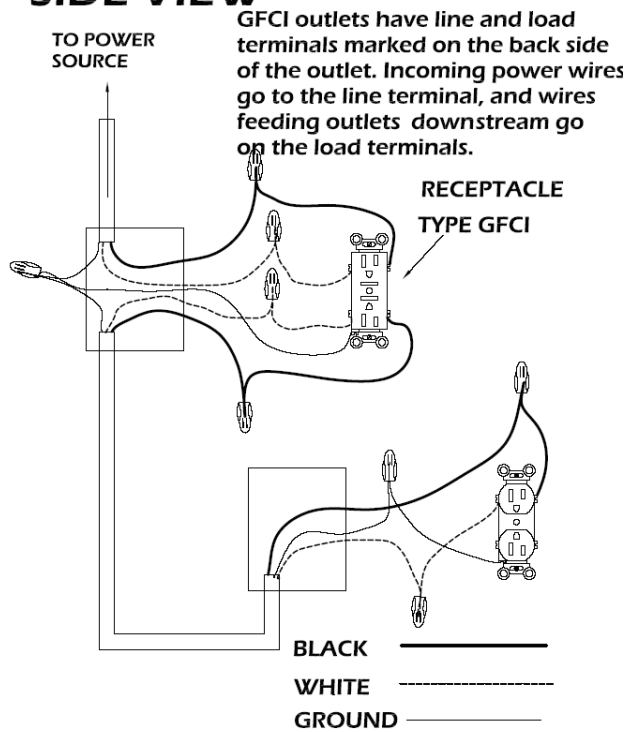
## **Arc-Fault Circuit Interrupter Protection.**

All outlets including light fixture outlets, smoke detectors, and receptacle outlets installed in locations throughout a dwelling unit other than in bathrooms, unfinished basements, garages, and outdoors require Combination Arc Fault Protection Circuit Breakers (AFCI).

The following are illustrations of the installation of GFCI:



### SIDE VIEW



GFCI outlets have line and load terminals marked on the back side of the outlet. Incoming power wires go to the line terminal, and wires feeding outlets downstream go on the load terminals.



## Electrical Box Capacity

BOX SIZE IN INCHES	MAXIMUM NUMBER OF #14-GAUGE WIRES ALLOWED IN BOX	MAXIMUM NUMBER OF #12-GAUGE WIRES ALLOWED IN BOX
<b>Wall Boxes—Rectangular</b>		
3" X 2" X 2-1/4" .....	5	4
3" X 2" X 2-1/2" .....	6	5
3" X 2" X 2-3/4" .....	7	6
3" X 2" X 3-1/2" .....	9	8
<b>Ceiling Boxes—Octagonal</b>		
4" X 1-1/4" .....	6	5
4" X 1-1/2" .....	7	6
4" X 1-1/2" .....	10	9
<b>Major Boxes—Square</b>		
4" X 1-1/4" .....	9	8
4" X 1-1/2" .....	10	9
4" X 2-1/8" .....	15	13

Overcrowd a box and you risk damaging solderless connectors, piercing insulation, or cracking a switch or receptacle, any of which could cause a short. That is why codes spell out how many wires you may install in boxes. The previous table displays the NEC requirements. As you count, bear in mind these points:

- Don't count fixture leads joined to wires in the box.
- Count as one a wire that enters and leaves without a splice.
- Count as one any number of cable clamps, hickey, or studs.
- Don't count external connectors; but if the box has internal clamps, do count them as one.
- Count each receptacle or switch as two.
- All grounding wires running in a box count only as one conductor.

All plastic boxes are marked inside the box with the box cubic inch capacity. You may calculate using the cubic inch capacity listed on the previous table for each size of wire use.

Cubic inch capacity of wire: 14 gauge = 2 cubic inches

12 gauge = 2.25 cubic inches

10 gauge = 2.50 cubic inches

**Example:** A box is marked "18 cubic inches" and you have two 14-2 nonmetallic sheathed cables entering the box. You count the 4 insulated conductors individually and the 2 ground wires as one and the device (switch or outlets) as two wires.

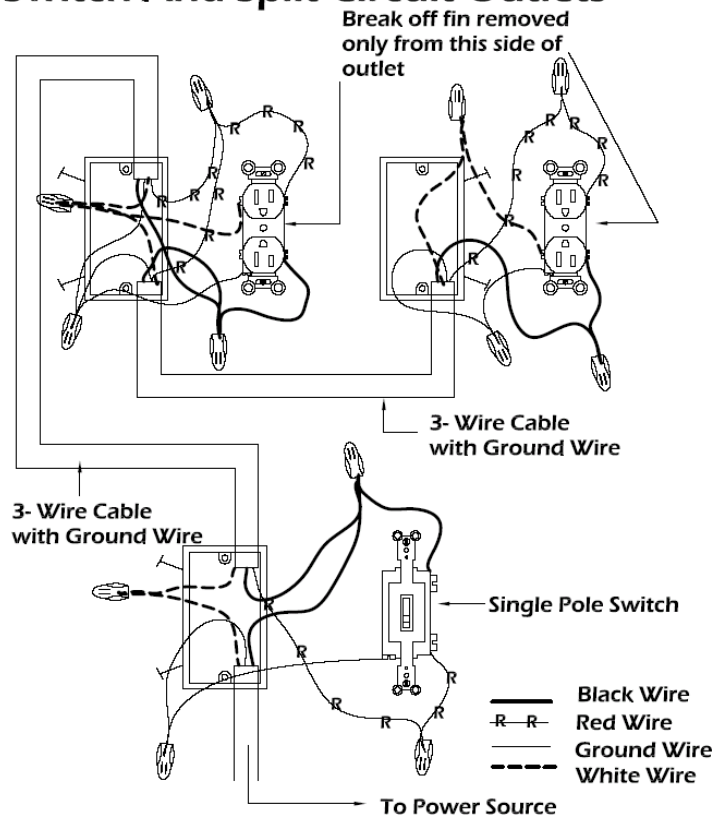
4 insulated wires x 2 cubic inches = 8 cubic inches

1 ground conductor x 2 cubic inches = 2 cubic inches

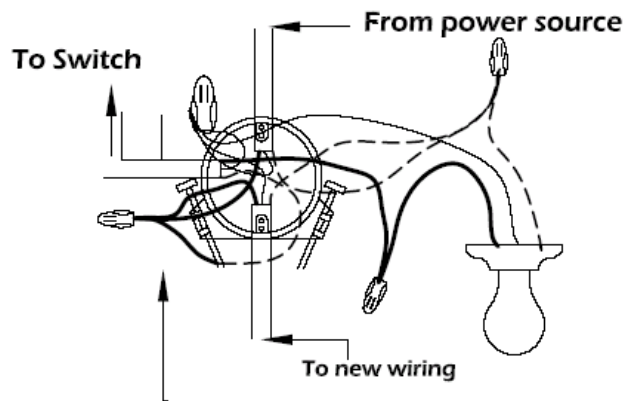
1 switch or outlet x 2 wires x 2 cubic inches = 4 cubic inches

Total = 14 cubic inches

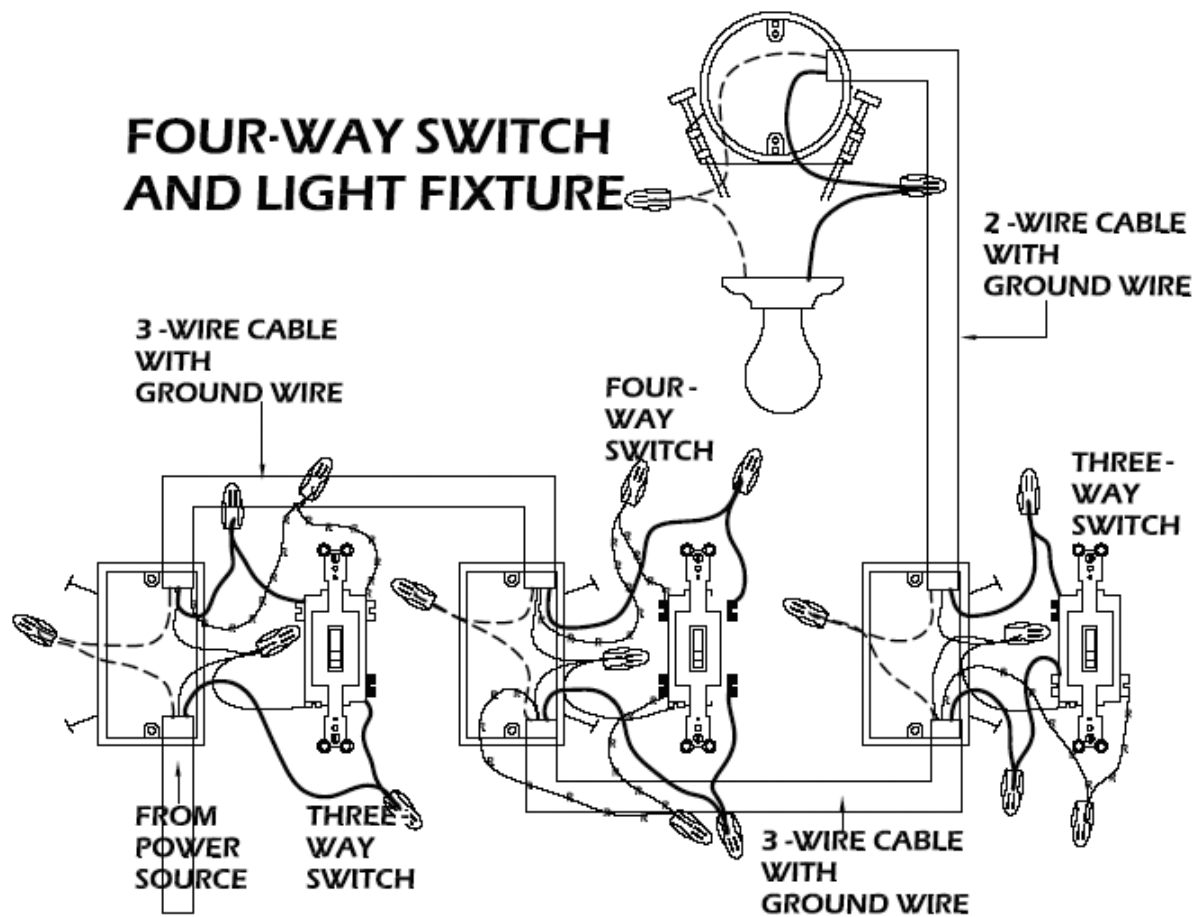
# Switch And Split-Circuit Outlets



BLACK —————  
 WHITE - - - - -  
 GROUND —————



# Switch Loop



The white wire is generally a neutral wire. The black and red wires are always hot. However, the one exception to this is if the power source first goes through the light fixture and then to the switch. You have to use a white wire as a (hot) black wire. When using a white wire this way, paint the wire insulation black (or tape it with black tape) at both ends where it joins a hot terminal or another hot wire; this identifies it as a hot wire.

## Inspections

### Required Inspections.

The holder of a permit is required by ordinance to request one day (minimum) in advance for the following inspections:

- Service inspection (if applicable).
- Rough-in. After all electrical wiring has been installed, in-floor heat cables or mats (if applicable), pigtailed completed, and no devices are installed, an electrical inspection must be completed before walls, ceilings, or floors are covered with insulation, sheetrock, lath, paneling, tile, or other building materials. All wiring that is covered up will be required to be exposed for the required rough-in inspection. After inspection, the Inspector will affix a tag stating that the rough-in work has been inspected, accepted, and may be covered. If corrections are required, the Inspector will issue and leave an inspection notice citing specific corrections that are required. When the listed corrections are completed, a request for a reinspection must be made and the inspection completed before wiring can be covered.
- Final. After all electrical work has been completed. If approved, the Inspector will affix a label inside the panel giving permission to energize the circuits. No work may be done on any part of the building or structure beyond the point indicated in each successive inspection without first obtaining the approval of the Electrical Inspector. All construction or work for which a permit is required is subject to inspection and all such construction or work must remain accessible and exposed for inspection purposes until approved.

**Calling for Inspection.** It is the responsibility of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. The City of Sioux Falls is not liable for expense entailed in the removal or replacement of any material required to allow inspection.

**Requesting an Inspection.** It is the responsibility of the permit applicant to provide accessibility to the work. All wiring is required to be exposed for required rough-in inspection. Anything covering up the wiring will be required to be removed. One should always keep in mind “If the inspector cannot see the work, the work cannot be inspected.” The City of Sioux Falls is not liable for expenses entailed in the removal or replacement of any material required to allow inspection. There are separate inspectors for the electrical, plumbing, building, and mechanical divisions. All of the applicable inspectors must approve the rough-in or framing of their specific division before anything is covered.

The permit holder must notify Building Services when the work is ready for inspection. To request an inspection, call 605-367-8670 one day prior to the inspection.

When calling for inspections, be prepared to give the following information:

- Building permit number.
- Street address.
- Owner’s name.
- Type of inspection needed.
- Date/time when responsible party will be present.
- Daytime phone number you can be reached at.
- Inspectors will not enter the living portion of an occupied dwelling unless an adult or contractor with authority over the dwelling is present and gives permission.

**Questions and Scheduling.** For direct question and scheduling with the Electrical Inspector for your area, call between the hours of 8 to 9 a.m. or 4:30 to 5 p.m., Monday through Friday, and follow the prerecorded instruction for:

Joe Van Ruler	1 or call direct line 605-367-8290
Don Hall	2 or call direct line 605-367-8690
Aaron Stroud	3 or call direct line 605-367-8679
Keith Pike	4 or call direct line 605-367-8676
Larry Kippes	5 or call direct line 605-367-8699
Cole Bartz	6 or call direct line 605-367-3960

For inspection request, dial 0.

**Reinspection Fee.** A fee may be assessed and must be paid before any further inspections will be made for any of the following reasons:

- When work, for which an inspection is called, is not completed or ready for inspection.
- When corrections called for are not made.
- When access to the premises is not provided on the requested inspection date.
- For deviating from the approved plans.
- When work is concealed from access or sight before it has been inspected.
- When work is done in phases that requires additional inspections, a fee will be charged per inspection; additional fees must be paid prior to inspection.

### Notice

The purpose of this document is to provide the homeowner with electrical requirements for residential construction. **These provisions are a condensed version of electrical requirements found and do not cover all requirements found in the *National Electrical Code* and locally adopted ordinances.** For electrical systems that exceed the provisions of this handout, the *National Electrical Code* and ordinances must be referenced.

The homeowner always has the option of hiring a licensed electrical contractor who will then be responsible for installing wiring systems in conformance with the *National Electrical Code* and ordinances. The electrical contractor would then obtain required permits and inspections as an alternate to obtaining a Homeowner’s Wiring Permit.